

GENDER AND DIVERSITY SITUATIONAL ANALYSIS

TANZANIA COUNTRY REPORT

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ACRONYMS

- C:AVA – Cassava; adding value for Africa
- CBSD – Cassava brown streak disease
- CMD – Cassava Mosaic Disease
- CRS - Catholic Relief Services
- DALDO - District Agricultural Officer
- DCDO – District Community Development Officer
- GLCI – Great Lakes Cassava Initiative
- HCN - Hydrocyanic acid
- HQCF – High quality cassava flour
- HQTCF High quality traditional cassava flour
- IITA – International Institute of Tropical Agriculture
- LHRC - Legal and Human Rights Centre
- NARS – National Agricultural Research System
- NRI – Natural Resources Institute
- RUDDO - Rulenge Diocesan Development Department
- SACCOS - Savings and Credit Cooperatives
- SILC – Savings and Internal Lending Communities
- TCF – Traditional Cassava Flour
- TFNC – Tanzania Food and Nutrition Centre
- UPT – United Peasants of Tanzania
- URT - United Republic of Tanzania

EXECUTIVE SUMMARY

The majority of Tanzanians live in rural areas and an overwhelming number are below the basic needs poverty line. Most people derive their livelihoods from agriculture and agribusiness related activities, and in most of these there is a clear distinction between the activities of men and women. In the three zones studied, crop farming was the main activity for both men and women, although men and women sometimes favor different crops. Men and women cultivate either joint or separate plots, or sometimes both. Separate women's plots are more common in female headed households and in polygamous households.

Men are most often responsible for tasks such as land clearing, while activities such as weeding and planting were done by women, especially on cassava. Other activities included trading, livestock rearing and artisanal work for both men and women, although they undertake different tasks within categories. The daily work patterns of women and men differ substantially. In general, women were found to work longer hours and have more varied tasks and responsibilities, such as childcare, food preparation, collecting water and firewood, compared with men; however roles are not static and are continually changing. A further finding was the generally low level of interest in agriculture among youth in the three zones.

Discussions at community level explored the relative extent of men's and women's access and control over assets and resources both at community and household levels. Although access to land was generally not considered a problem in most of the locations visited, it was an issue among some social groups. In patrilineal communities, women can access land only through the male household head, and in some cases, through their family. In matrilineal communities, women can own land, but decision making authority rests with a male uncle. Women can also legally acquire land through purchase or rent. However, women are more likely to be limited in their ability to do so due to poor access to credit and lack of collateral. Female headed households face particular barriers in communities that follow customary laws that exclude women from land ownership. In general, vulnerability was defined as individuals who are unable to use the land. This is most often the elderly and sick, or people too poor to invest in land.

Lack of access to credit was seen as an important constraint preventing further investment in agriculture, particularly among women. However, there are some opportunities to access credit for both male and female farmers, including savings and credit societies, informal borrowing, revolving savings schemes or NGOs and government schemes. Lack of mobility for women also constrains their participation in activities such as marketing, because of their lack of time and the means of transport, and because in some places, it is culturally unacceptable for women to travel.

In most sites visited, the ownership and control of resources at the household level was articulated as joint ownership. In most male headed households, men are the key decision makers on income which is controlled and allocated by them, even in matrilineal societies. This raises the question for C:AVA and GLCI, that if women are given more opportunities to participate in cassava production and processing for the market, will they receive the benefit? While not completely separate from household dynamics, women's involvement in groups for farming and/or processing, where decision making is done through elected committees (often all female in the case of women's groups), can provide an alternative channel to access benefits from their own labor. However, groups varied in the degree of skill and transparency with which their leadership managed group resources.

Farm size varied in the different regions. In the Southern Zone, farm sizes were between two and ten acres per household; in the Eastern Zone, approximately five acres, and in the Lake Zone, between three and five acres. The average area of cassava planted was approximately two acres per year per household. In all sites, both men and women use many different varieties of cassava and tend to intercrop it with crops such as maize, cowpeas, groundnuts, sorghum or pineapples. In most of the villages visited, all the field tasks for cassava production are done manually, using simple implements such as a hand hoe and a cutlass.

In all three zones, cassava plays an important role in household food security and as an income generating crop. In terms of household consumption of cassava, there were five common forms found among all sites, including cassava leaves, fresh roots, dried roots (grits and chips) and traditional cassava flour. Although both men and women grow cassava, with children assisting in lighter duties, cassava processing is mainly carried out by women.

In the context of the challenge to cassava production posed by diseases such as cassava mosaic disease (CMD) and cassava brown streak (CBS) the access of farmers to high yielding and disease resistant planting material is very important. In the Southern Zone, farmers in most villages indicated that they are getting cassava planting materials from various sources; however, respondents in the Lake Zone reported difficulties in accessing sufficient amounts of tolerant varieties. Partners also reported problems with meeting the demand for these materials. In addition, the conditions required of farmers in order to receive cassava cuttings for multiplication may narrow the number of farmers eligible to participate.

Farmers' groups and processing groups at village level are key to C:AVA and GLCI strategies in working with communities. Farmers' groups grow crops, particularly cassava, on their group plot, contributing labor and sharing the proceeds. Their main constraints were lack of information on markets as well as lack of equipment. The membership of farmers' groups met during the study was relatively gender balanced. However, some processing groups have more female membership, building on women's traditional role in processing. The group leader (chairperson) was usually male in mixed-sex groups, whereas supporting leadership (treasurer and in some cases the secretary), were women. Women were more likely to be leaders of women-only groups. It is important to note that women's groups in particular can provide opportunities for women to participate in leadership and decision making, increasing access to equipment and forwarding women's strategic interests. Most groups require their members to pay an entry fee and a regular contribution, which if too high, can prevent some members from joining. Many of the groups consulted have equipment that is shared equally amongst members, along with profit.

Men and women indicated that they have adequate knowledge and skills on how to grow cassava in their own fields which they inherited from their parents. Other sources of information were community meetings, and government and NGOs working in the area. Various communication technologies offer potential for improving farmers' access to information relating to cassava; yet access to modern media – radio, mobile phones, TV etc. tends to be less available for women and girls in comparison to men and boys.

Women's employment in intermediary processing enterprises and in end user businesses was often precarious. Employees in most intermediary processing enterprises were women who work on a part time or piece rate basis, offering little job security. Management was usually male. In milling industries, the majority of employees are male, except for women in administrative positions, in packaging or cleaning positions, all of which are offered on a contractual basis. Biscuit manufacturers reported that the majority of employees are women, due to the "delicate work" of

packaging. Overall, women were able to take maternity leave (although there is restriction in how often) and usually had separate toilets from men.

Factors promoting women's participation in cassava production and processing included the preference of some enterprises to employ women; NGO's and churches programs for large-scale cassava production; district councils' promotion of women's participation, and women's access to land for cassava production. Some of the factors hindering women's participation were the lack of assured markets, male dominance in leadership roles in farmers groups, prevalence of cassava diseases, lack of processing equipment and lack of business skills for women.

Recommendations for C:AVA/GLCI include:

1. Mainstream gender sensitization into all activities targeting farmer/processing groups and community leaders.
2. Awareness activities on the profitability and importance of agriculture, and specifically in cassava value addition, should be promoted among youth.
3. Ensure communication and training material is gender-friendly with regard to the format and content.
4. Specific information should be included on women's land and natural resource rights and cassava-crop management.
5. Ensure that an equitable proportion of the beneficiaries are women and youth.
6. Promote women's active participation as leaders by providing targeted leadership training courses for women
7. Work with enterprises and industries to create a more inclusive and supportive environment for their workers.
8. Undertake capacity building in group management for farmer/processing group leaders.
9. Target women in a capacity building program on the technical aspects of cassava production, cassava disease identification and cassava processing.
10. Cooperatives or joint-ventures in farmers/processing groups should be encouraged among women's groups to increase the ability of the group to access credit and technology and equipment.
11. Develop an equitable plan for cassava multiplication and distribution in order to increase access to material for the population in general, and particularly for women and vulnerable groups.
12. In order to prevent women's workloads from increasing: partner with other organizations to disseminate labor saving technology and partner with credit facilities to improve access to credit for individuals to improve investment in cassava production and processing for individual farmers and village level processing.
13. Develop a socially-sensitive and participatory monitoring and evaluation plans and impact assessment tools. This should be combined with capacity building for partners in use and analysis of the data collected.

1. INTRODUCTION

1.1. Background Information and Context of the Study

Currently, about half the world's production of cassava is in Africa. Cassava is cultivated in around 40 African countries, stretching through a wide belt from Madagascar in the Southeast to Senegal and to Cape Verde in the Northwest. Likewise about 70 % of Africa's cassava output is harvested in Nigeria, the Congo and Tanzania (IFAD and FAO, 2000). Throughout many countries in Africa, cassava is either a primary or secondary food staple. In some parts of these countries, including Tanzania, cassava is both a cash and a food crop.

This report presents the findings of studies on 'Gender and Diversity' relating to cassava in Tanzania. It is part of the gender and diversity component of two regional projects funded by the Bill and Melinda Gates Foundation.

Cassava: adding Value to Africa (C:AVA) is a four year project implemented by the Natural Resources Institute (NRI) of Greenwich University, United Kingdom, together with partners in five countries in Sub-Saharan Africa, namely; Nigeria, Ghana, Tanzania, Uganda and Malawi. It is aimed at creating sustainable and equitable High Quality Cassava Flour (HQCF) value chains to improve livelihoods and incomes of smallholder farmers and micro, small and medium scale enterprises (SME's). In Tanzania the project is implemented in partnership with the Tanzania Food and Nutrition Centre (TFNC), Dar es Salaam. The project's purpose is to support sustainable and equitable high quality cassava flour (HQCF) value chains and thereby improve the livelihoods and incomes of smallholder households and stakeholders in micro, small and medium scale enterprises (NRI, 2008).

The Great Lakes Cassava Initiative (GLCI), implemented by Catholic Relief Services, is working with local partners to strengthen capacity to address cassava mosaic disease and cassava brown streak that threaten food security and incomes of cassava dependent farm families in Burundi, Democratic Republic of Congo, Kenya, Rwanda, Tanzania and Uganda.

The component which is addressing gender and diversity issues in the two projects (C:AVA and GLCI) reflects one of the key priorities of the Bill and Melinda Gates Foundation. This concern stems from the realization that gender imbalances in local communities and along the cassava value chain can limit the successful implementation of the project and/or its outcomes. The two projects are committed to addressing gender and diversity issues in order to mainstream gender and social inclusion throughout their activities, to ensure equitable distribution of benefits, and promote the participation and empowerment of women and disadvantaged groups. As an initial step in meeting this commitment in Tanzania, a study was conducted covering gender and diversity issues in cassava value chains and a situational analysis of gender and diversity at community level in the projects' main operational locations.

1.2. Study Objectives

The objective of the studies was to understand the gender roles and relations and diversity issues relating to cassava production and processing at different levels; from individual, household and village level, to markets and end users of high quality cassava flour, in order to contribute to the strategy development, gender and diversity sensitive programming and practical implementation of both projects in Tanzania. The issues explored included;

- Gender participation in the cassava value chain; including women as workers and managers in cassava enterprises and trade associations.
- Gender roles responsibilities and household division of labor.
- Situation of vulnerable and disadvantage groups and households in different locations
- Access to and control of assets and resources, including access to land and control of incomes from cassava related activities.
- Power, decision making and gender relations within households and among actors in the value chain.
- Cassava and livelihood strategies
- Cassava production and processing groups – organization, composition, leadership, benefits.
- Gender, diversity and communication
- Factors promoting or discouraging participation of women and the poor and their capacity strengthening needs.
- Local organizations and service providers.
- Changes needed to achieve gender equality and wider access to opportunities and benefits from cassava production, processing and marketing.

1.3. Structure of the report

The report is presented in five major parts as follows: Section one presents the background to the study and the overall and specific objectives. Section two discusses the methodology, including the scope and coverage of the study, the selection of stakeholders, enterprises and village communities; methods of data collection and the study limitations. Section three presents the country context, providing information from secondary sources related to national policies on gender and diversity, gender and diversity in agriculture and agro business in Tanzania. It includes information on social cultural and religious issues and gender and employment issues. Section four, which is the core of this report, presents the findings of the gender and diversity situational analysis for the Southern, Eastern and Lake Zones as well as the gender and value chain analysis dealing with cassava trade and enterprises. The final section presents the recommendations and implications for C:AVA and GLCI.

2. METHODOLOGY

2.1. Scope and coverage of the study

The studies were carried out between January and March 2009, starting with the gender and value chains study in Dar es Salaam, Morogoro, Mwanza, Tanga, and Bungu. Here, the main emphasis was on the situation of men, women and youth employed in cassava processing, trading and end-user enterprises such as the wheat milling sector, biscuit manufacturers, bakeries, supermarkets, and plywood manufacturers. There was also consultation with government departments, including the Ministry of Industry, Trade and Marketing and the Ministry of Agriculture, Food Security & Cooperatives and district agricultural offices; research institutes (Ukiriguru and Mlingano) and the University of Sokoine. Visits were made to traders in fresh and dried cassava in markets in Dar es Salaam, Mwanza and Morogoro and meetings were held with processor groups Bungu and Mwanbaya, an individual processor in Mwanza, and dormant processor groups at Zogowale and Mtimbwani.

This was followed by the field-level gender and diversity situational analysis. The gender and diversity consultant linked with the C:AVA scoping study team for a planning workshop and followed a joint process of site selection for field visits and

logistical arrangements. The situational analysis focused on three Zones; Southern (comprising Mtwara, Lindi, Masasi and Newala), Eastern (comprising Coast and Morogoro – Rufigi, Mkuranga, Kibaha and Ulanga) and the Lake region (comprising Mara, Mwanza and Kagera - Nyamagana Chato and Biharamulo Districts)¹. In each Zone the study team interacted with smallholder farmers’ groups and communities involved with cassava production; community based households and groups involved in processing and marketing; service providers and intermediary institutions such as NGOs (local and international) and government extension staff.

A list of all the contacts made during the studies, including farmers, farmers’ and processors’ groups, service providers, intermediary institutions and private sector companies that were visited in the three Zones is provided in Table 1.

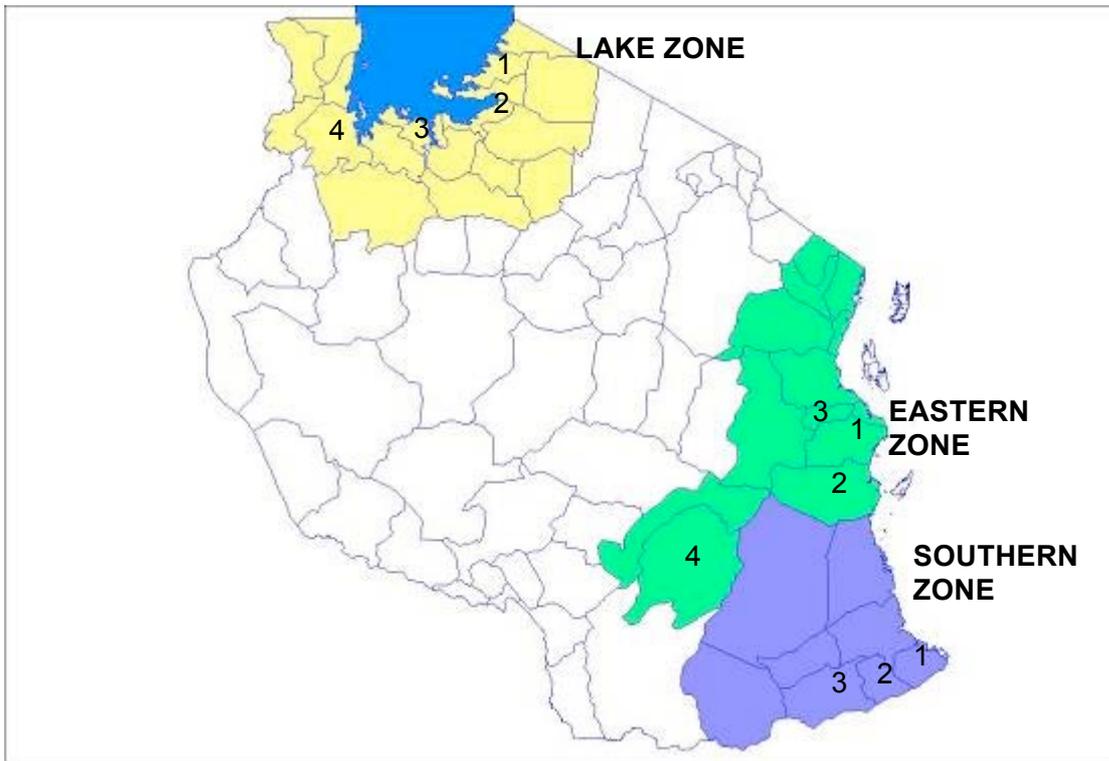
Table 1 List of communities and other stakeholders visited.

Zone, Region & District	Farmer and farmer/ processing groups visited	Service providers, government institutions and industry contacts visited
DAR ES SALAAM	Farmer processing group Mwanbaya	Tanzania Food and Nutrition Centre Bakhresa Powerfoods Ltd Bake Food International Ltd Coast Millers Ltd 21st century (mill) Ministry of Industry, Trade and Marketing Ministry of Agriculture, Food Security & Cooperatives Tanzania Revenue Authority Presidential Initiative
SOUTHERN ZONE		
Lindi Region		Regional Agricultural Officer (RAA) District Agricultural Officer (DALDO)
Mtwara region Mtwara Rural District	Mbuo women processing group, Misjute village Msijute villagers Jitegemee Farmers Group, Mbwala village Ukombozi women group, Mpanyani Village Kazimoto farmer group Mpanyani Village	DALDO Mtwara urban DALDO Mtwara rural DED – District Executive Director Mtwara Rural district. United Peasants of Tanzania (UPT) One UN CONCERN Worldwide Naliendele Agricultural Research Institute (with researchers from Sugar Cane research Institute) Kiteme Millers Mtwara Bakili Milling, Mtwara
Masasi District	Ujamaa Processors Association, Namichi Village Farmers in Namichi village Chisegu Farmers Processing Group, Chisegu village	DALDO Masasi CRS Masasi KIMAS (Masasi people’s umbrella organisation)
Newala District	Muungano Cassava Processing Group Mtangalanga Village	DALDO Newala

¹ Both the gender and diversity specific studies were conducted alongside the overall Value Chains Analysis and Scoping Studies for the C:AVA project. The Scoping study also covered Eastern region.

Zone, Region & District	Farmer and farmer/ processing groups visited	Service providers, government institutions and industry contacts visited
LAKE ZONE		
Mara Region Musoma Municipal		Tanzania Mennonite church, Lake Diocese, Musoma (NGO) Regional Manager, SIDO, Musoma DALDO/ SMS Musoma office
Mwanza Region Mwanza city		DALDO Lake Zone Agricultural Research and Development Institute (LZARDI), Ukiriguru KIMKUMAKA (NGO) CRS Agriculture and Livelihoods manager CRS Country programme manager, Lake Zone. Victoria Bakery; Pamba House Supermarket; Small-scale flour mill
Magu district	Individual female cassava multiplication and processing entrepreneur, Kanyama village, Kisesa ward.	
Nyamagana District	Twijube farmer group, Fumagila village	
Kagera Region Chato District	Busaka processing group, Busaka village	
Biharamulo District	Nyarubungo Outgrowers Association, Kasuno village	RUDDO (NGO)
EASTERN ZONE		
Pwani Region Rufiji District	Sululu Farmers and processing group, Bungu village Majaribio community based processors group, Jaribu Mpakani village	District Agricultural Dev. Officer (DALDO) District Community Dev. Officer (DCDO) Utete.
Mkuranga District	Muhogo SACCOS Group Tambani Village. Umaumikuu Cassava Processors Association, Mwanambaya village	
Kibaha District	Soga Cassava Farmers and Research Group, Soga Village	District officials/ District commissioner; District Administrative Secretary; District Executive Director; DALDO/ SMS Jumuiya Endelevu Bagamoyo JEBA (NGO)
Morogoro Region Morogoro urban		Intermech Engineering Ltd Sokoine University of Agriculture PASS. UNNAT. New Jambo bakery District Agriculture and Livestock officer
Ulanga District	Male and female farmers Mbuga village Mbuga village executive officer	District Administrative officer DED – District Executive Director DALDO/SMS District commissioner
Tanga Region	Mtimbwani Farmer processing group	Ply & Panel Ltd; Pembe Flour Mills Ltd; District office. Mlingano Agricultural Research Institute

Figure 1 Map of Tanzania showing districts visited during the situational analysis.



LAKE ZONE

- 1. Musoma
- 2. Magu
- 3. Mwanza
- 4. Biharamulo and Chato

EASTERN ZONE

- 1. Mukuranga
- 2. Rufiji
- 3. Kibaha
- 4. Ulanga

SOUTHERN ZONE

- 1. Mtwara
- 2. Newala [and Tandahimba]
- 3. Masasi

2.2. Approach and survey tools

The concepts used for the situational analysis have been informed by literature on gender analysis frameworks, particularly Moser (1987, 1989 and 1993) and Kabeer (2001). These frameworks emphasize practical and strategic gender needs and women’s empowerment to overcoming poverty, which is helpful in identifying gender priorities and their estimated impact. For this study, Kabeer’s (2001) definition of empowerment is utilized: ‘the expansion in people’s ability to make strategic life choices in a context where this ability was previously denied to them’, which includes analysis of empowerment in economic, socio-cultural, familial/interpersonal, legal, policies and psychological spheres’. These concepts are also reflected in the Bill and Melinda Gates Foundation Gender Strategy.

The studies were qualitative in nature. For the gender and value chains study, information was collected using a checklist of questions designed for different categories of value chain participant. The checklist was used in semi-structured interviews, combined with direct observations in the field. For the gender situational analysis the study tools employed included desk review, focus group discussions (FGD) using a structured check list, key informant interviews (KII) and participant observation (PO). These research techniques were applied in all the sites visited in all three Zones. Further, in each of the districts visited, one to one interviews were held with the District Agriculture and Livestock Development Officer (DALDO) and District

Community Development Officer (DCDO's), farmers Groups, processing organizations, men's and women groups, service providers, intermediary institutions and other relevant institutions.

The checklists used for the value chain study and situational analysis are found in appendix 2.

Some limitations of the study are worth mentioning. Time constraints were a major problem, particularly for the situational analysis which had just two weeks of field work. More time was needed to build trust with the respondents. Methods used to collect information on gender and diversity issues needed more time particularly those related to establishing the factors promoting and limiting women's' participation in development and exploring the gender division of labor. Access to official gender disaggregated data on relevant aspects was not easily available. Due to time constraints only qualitative research instruments were used.

3. COUNTRY CONTEXT - GENDER AND DIVERSITY ISSUES IN TANZANIA

3.1 National and Regional Policies on Gender and Diversity.

Since the late 1980s, Tanzania has undergone significant socio-economic reforms representing a move away from the interventionist and socialist policies of President Nyerere (Ujamaa) to a more market-led and decentralized system. In the context of these reforms, the Government of Tanzania has made considerable efforts to integrate gender into its policy-making and institutional activities.

The Government of Tanzania has introduced gender equality policies in the economic, political and social spheres, with policies emphasizing non-discrimination and the use affirmative action. Examples include the commitment to increasing the number of parliamentary seats reserved for women, the requirement of employers to register and report on equality issues to a Labor Commissioner, and the provision of rights to maternity leave and breastfeeding. These policies have been introduced on the basis of the equality principles enshrined in the Tanzanian Constitution, which ban sex discrimination of any kind.

The general policy objective of the Tanzania Agriculture and Livestock Policy is to commercialize agriculture in order to increase farmers' income, reduce poverty, achieve food security, increase export earnings, support and promote agro-industries and environmental conservation. The policy document recognizes that the marginalized position of women is attributable to poor access to land, credit and services and emphasizes the importance of engendering extension services by recognizing women's multiple roles and time constraints. The Land Act and Village Land Act of 1999, which repealed customary and traditional practices, was enacted to provide gender equality in the ownership, use and management of land. Women are also recognized as being significant contributors to the small and medium-sized enterprise sector (SME) in the SME Development Policy of 2000 (TGNP, 2006; ADB, 2005).

In addition to a series of national gender policies, Tanzania is a signatory to various international policies on equity and non-discrimination, such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Beijing Platform of Action. It is also party to regional and sub-regional policies, such as the SADC Declaration on Gender and Development and the African Charter of Human and Peoples Rights of 1981 (ACHPR). Tanzania has also ratified all eight core ILO

Conventions, including Convention 100 and 101, which are drafted specifically to counter discrimination in women's employment (TGNP, 2006).

During the early 1990s, the Tanzanian government formed the Ministry of Community Development, Women and Children (MCDWC) to oversee policy and programs on community development, women and children's affairs, and family planning, and coordinate gender issues in the country. In 2000 the name was later changed to the Ministry Community Development, Gender and Children (MCDGC), representing a strategic shift towards a Gender in Development approach. The Ministry works in a range of priority areas, such as policy-making, institution-building, legal and human rights, education, employment, decision-making and health care. The Ministry also established the position of 'Gender Focal Points' in each ministry and at various levels of government and introduced gender budgeting initiatives in selected sectors (ADG, 2005).

Gender also plays a strategic role in poverty alleviation in Tanzania. In the mid-1990s, the Government instated the Vision 2025 development strategy, which set out the national vision to attain human development and a fully developed economy. The principal goal is the development of Tanzania into a middle-income country by the year 2025. Key to this are the processes of moving to a more industrialized society and increasing productive agricultural activities; emphasizing livelihood improvement; peace, stability and unity; guaranteeing good governance; providing education and ensuring economic competition). Vision 2025 includes reference to the importance of gender equality and women's empowerment in socio-economic relations, political life and overall culture, in order to improve livelihoods and guarantee equal access to education and healthcare (Planning Commission, 1995). The Tanzanian Government has developed a comprehensive Poverty Reduction Strategy that aims to encourage the full participation of women in eradicating poverty, and the promotion of equal opportunities for men and women. During this period of the late 1990s, the Government also began to devolve more power in the agricultural sector to the district level. Districts then became responsible for developing District Agricultural Plans (DADPs), designed to address local issues and encourage greater participation in extension services and development. The Agricultural Sector Development Strategy (ASDS) was launched in 2006, and the Agricultural Sector Development Program (ASDP) for agricultural growth and poverty reduction has been implemented since, linked with the National Strategy for Growth and Reduction of Poverty. However, the majority of the Government's efforts in addressing gender have been criticized due to the lack of human and financial capacity institutions have to implement policies, and lack of capacity at the district level (particularly in expertise and data collection) (ADB 2005).

As far as economic development is concerned, it is pertinent to note that the economy did not perform as well for the year 2007 compared to the previous two years. This is due to various reasons, including among others, the adverse effects of severe food and power shortages as well as drought, deterioration of key sectors and poor infrastructure and means of communication. As a result of these factors, the economy experienced inflationary pressures emanating from rising oil and food prices and a hike in transport prices, particularly during the second half of 2007. As the LHRC (2007:3) confirms, the inflation rate fluctuated throughout that year, for example increasing from 5.9% in June to 9.0% in July, then declining to 7.8% in August and further to 6.4% towards the end of the year. This performance did not meet government's expectations. Available records suggest that the government target for the year 2006/07 was to reduce the rate of inflation to 4.0 % (URT, 2007: 6)

3.2 Social, Cultural and Religious Influences and Regional Diversity.

The Tanzanian mainland occupies a land area of 945,000 square kilometers (378,000 square miles). The main capital is Dar es Salaam City which is the largest city as well as the center for executive functions, while Dodoma town (which is located in the center of Tanzania), has been designated as the legislative capital. The Parliament meets in Dodoma four times a year. Likewise, the office of the Prime Minister is based there.

In 2008, the Tanzania mainland was estimated to have a total population of more than 39 million, of whom 51% were women. Tanzania has a very young population; about 44% of the population is below the age of 15 years and only 4% above 65 years in 2002.

The majority of Tanzanians (85%) live in rural areas and derive their livelihoods from agriculture and agribusiness related activities. The remaining (20%) are employed in the public and private sector including industry, commerce, and government. Poverty remains overwhelmingly rural, with some 83% of individuals below the basic needs poverty line living in rural areas. Districts in the Southeast have the worst adult literacy rates, under five mortality rates and access to improved water.

The Tanzania Bureau of Statistics Gender Profile of Smallholder Rural Agriculture Population in Tanzania mainland (2002/2003) showed that although 80% of farming households were male headed, over the previous two decades there had been an increase in female headed households of 14%, in comparison to 8% increase in male headed households. In some areas the increases were much higher, for example in Lindi, female headed households increased by over 30%.

Young people (12-17) were also involved in non-farm income generating activities. More children, both boys and girls, age 5-17, were involved in agriculture in female headed households than in male headed households. There were more elderly men in agriculture than elderly women in all regions.

The population consists of more than 120 ethnic groups, of which the largest five are the Sukumas, Hayas, Nyakyusas, Nyamwezis, and Chagas. Each of these ethnic groups has more than one million people. The majority of Tanzanians, including such large tribes as the Sukuma and the Nyamwezi, are of Bantu speaking people. The remaining ethnic groups belong to the Nilotic group and these include ethnic groups such as the Masais and the Luos, both of which are also found in greater numbers in neighboring Kenya. At the same time there is a small minority group comprising of Hadzape people who still derive their livelihood from hunting and gathering. Each ethnic group has its own language, but the majority are also conversant with Kiswahili which is the official national language and medium of communication. The official languages are both Swahili and English. There are three main religious affiliations, including Christians (40%), Moslems (40%) and traditionalists (20%).

Tanzania has 20 administrative regions and its population distribution over these regions and districts is extremely uneven. For instance, whereas some regions have as few as one person per square kilometer (3 per square mile), there are regions with nearly 200 persons per 51 square kilometer (133 per square miles) particularly in the well-watered highlands including the Kara islands and Kilimanjaro region. However, the national average density is 26 persons per square kilometer.

3.3 Gender and Employment in Tanzania

As is the case in most countries worldwide, women and men in Tanzania have been found to enter the labor force in different ways, and on different terms. In addition to differences based on gender, there are other socio-economic differences. For instance, there are marked differences among different groups of women and men with respect to location (rural-urban) class (rich-poor); education (educated – non educated) and type of jobs (skilled-unskilled), full time or part time, paid–unpaid, formal-informal, sector (public–private) and age etc. Certain kinds of work have been stereotyped as being masculine ('male') or feminine (female'), because of the socialization process into the prevailing gender division of labor which stipulates different roles for men and women. In most rural areas women carry water, firewood and farm produce on their heads, take care of children, cook and farm. In urban areas women are also concentrated in unskilled part time activities mostly in the informal and private sector. Only 32 % of the public sector employees are women. However, the majority of these are employed in 'female' stereotyped activities such as secretaries, telephone operators, school teachers and nurses.

Gendered assumptions, however, contribute to a process whereby most women are allocated low paid, unskilled or lesser skilled work in both the formal and the informal sectors of the money economy. The terms upon which women and men compete for employment are set by wider social relations, including cultural, economic and political arenas. These include the assumption that a woman's primary commitment is to care for a family at home, in the 'reproductive' sphere of life; and that each woman depends on a male provider for cash needs.

The skills label itself is usually arbitrary, and culturally defined. Skills associated with women tend to be undervalued, and defined as unskilled, even when they entail complex actions and thought processes, such as child care, subsistence farming or agro processing.

4. PRESENTATION AND ANALYSIS OF FINDINGS

Findings are presented based on the focus group discussions at rural community level in three Zones of the country, followed by insights from intermediary and end user stakeholders interviewed during the value chain analysis.

4.1 RURAL FARM HOUSEHOLDS, GROUPS AND COMMUNITIES

The gender situational analysis was undertaken in three Zones of the country, Southern, Eastern and Lake Zone. Table 2 shows the village level communities and groups that were visited and the numbers of men and women who participated in the discussions.

Table 2 Village communities and groups visited and numbers of informants

Zone	Districts	Communities and groups visited	Informants	
			M	F
Southern Mtwara	Mtwara Rural District	Key informants Msijute village	5	2
		Mbuo women processing group, Msijute village (inactive processing group)		2
		Jitegemee Farmers Group, Mbawala village (members 12 women, 1 man, carrying out farming and processing)		1
		Ukombozi women group Mpanyani Village, farming, processing, small enterprise		6
		Kazimoto farmer group (mixed group)	3	1
	Masasi District	Ujamaa Processors Association, Namichi Village (mixed group)	1	1
		Individual farmers in Namichi Village	3	1
		Chisegu Farmers Processing Group (mixed)	17 (mixed)	
	Newala District	Muungano Cassava Processing Group, Mtangalanga village (members 9 women, 2 men)	1	2
Lake	Magu district	Individual interview with cassava multiplication and processing entrepreneur, Kisesa.		1
Mwanza region	Nyamagana district	Twijube farmer group, Fumagila village (mixed group; women and men interviewed separately)	3	4
Kajera region	Biharamulo district	Nyarumbugu Outgrowers Association, Kasuno village	6	4
	Chato District	Busaka processing group, Busaka village, (mixed)	3	2
Eastern Pwani region	Rufiji district	Sululu processing group, Bungu village (mixed)	1	2
		Majaribio community based processors group, Jaribu Mpakani village (mixed)	5	3
	Kibaha Rural district	Soga Cassava Farmers and Research Group, Soga.	33 (mixed)	
	Mkuranga district	Muhogo SACCOS, Community based farmers' and processors group Tambani village (mixed)	20 (mixed)	
Umaumikuu Cassava Processors Association, Mamangwa and Mwanambaya village. (mixed)		1	1	
Morogoro region	Ulanga district	Mbuga individual farmers, Mbuga village. (women and men interviewed separately)	6	5
Tanga Region		Mtimbwani Farmer processing group	23	20

4.1.1 Gender roles, responsibilities and the division of labor

An important dimension of gender analysis is the examination of daily, seasonal and spatial patterns of work of men, women and children in domestic, agricultural enterprise and livelihood activities. In most rural areas in Tanzania there is a clear pattern of participation and division of labor between men and women that is not uniform, but varies from place to place depending on the type of economic activities and local cultural norms and values.

The daily work pattern of women and men differ substantially. In general, women were found to work longer hours and have more varied tasks and responsibilities compared with men. In Mbawala village and Mpanyani village in Mwanza district, women wake up at 6 o'clock in the morning and go to fetch water, whereas husbands wake up at 7am. In households where they can afford breakfast, the woman prepares breakfast. Otherwise, for the majority the usual practice is to go to the farm directly. Both men and women stay in the farm until midday when they both come back home for lunch which is prepared by the women. After lunch, both men and women rest for a while before going back to their respective farms until around 5 or 6pm in the evening. The women collect firewood and vegetables. Thereafter, women go back to their respective homes to attend other household chores, while men go out to socialize. In Mpanyani village, it was reported that some men can stay out until past ten o'clock or later when there are social events such as the world soccer cup.

The interaction of gender, age and land and crop management can be complex and is closely related to household structures. For cultivation of crops, men and women have joint plots (usually husband and wife together) or separate plots – the latter being more common in female headed households and in polygamous households. Separate plots for men, women and children were more common in the Lake Zone, but were also found in the Southern Zone in Masasi district. Separate plots can afford women more direct control over the land and the goods from it, in some cases. Villages with high rates of polygamy were Fumangila village, Nyamagana District, Mwanza Municipal and Mpanyani Village, Mtwara Rural. Cassava is grown by both men and women in family farms, or on men or women only managed farms. Women heads of households usually manage their own land and crops; and young people in a household may have their own plots. Both men and women rear livestock, particularly small stock in the case of women. In communities near water, men's activities included fishing.

Table 3 shows the participation of men, women, children and hired labor in the main activities associated with cassava production and processing. Few activities were considered as the exclusive responsibility of either men or women. The exceptions were land clearance (men) and the activities associated with cassava processing - washing, soaking and drying which are more commonly carried out by women, particularly in Lake Zone and Eastern Zone. In all areas, children assist with the lighter agricultural field activities and processing tasks. Tasks performed by hired labor are mainly for heavier production tasks, with few locations reporting assistance from hired labor for processing.

Taking each region in turn, in the Lake Zone, both men and women are involved in production of cassava. However, men are responsible for cultivating land and marketing produce while women are responsible for more regular tasks such as planting, weeding and cassava processing. A similar picture was given in the Eastern Zone where men mainly carry out the heavy agricultural tasks (e.g. land clearing and ridging) at the beginning of the season, while women are more involved with tasks, particularly weeding, which are carried out over the whole of the cropping season.

In the Southern Zone the activities more likely to be done by men were land clearing and tillage, while women specialized more in cassava processing activities, which is similar to the Lake Zone. Children assist with some activities such as peeling or washing. However, processing and packaging activities are done by women only in order to guarantee quality of the final product. Men were increasingly becoming involved in processing activities.

Cassava roots are perishable and they easily get spoiled within three to four days after harvest. They are also heavy because of the high moisture content (nearly 70 %). In addition, cassava roots contain cyanogenic glucosides which break down to form hydrocyanic acid (HCN) that is toxic and poisonous if consumed in large amounts. Processing is necessary to reduce the moisture content and weight and to improve product storage, enhance flavor and reduce the HCN potential. Traditional processing methods are very effective in reducing the HCN potential to safe levels, if properly carried out. It is mainly women who carry out processing of traditional cassava flour.

Gender specialization appears to be more marked in the Lake Zone than the Eastern or Southern Zones, especially in processing. Most men-only tasks in cassava cultivation are labor intensive, but short term, whereas those of women are more routine and time consuming. Given the importance of women's tasks in the management of the cassava crop, including women in training is vital for project impact. However, women's work patterns present a challenge to finding appropriate times and locations for training.

In all regions, labor is hired to assist with field operations, although in the Southern Zone this was said to be restricted to the relatively better off families who employ hired labor during land clearance, tilling, weeding and harvesting. In most families, the common practice is for their own children to assist in almost all these activities. This is purposely done in order to develop and impart knowledge and skills for use in future. Only Lake Zone villages reported employing labor to assist with processing tasks. The cost of hiring labor varied from village to village and was negotiated between the farmer and laborer. Both men and women hired labor, for instance, in Fumagila Village, in Nyamagana District, both men and women hired labor from neighboring districts, Kwimba and Misungiri. Women use part of their incomes from other income generating activities such as vegetable production and livestock rearing to cover these costs.

In some areas of Lake Zone (Nyarubungu village, Kagera region) and some locations in Mtwara in Southern Zone, the practice of collective labor was common for some activities in cassava production. For example in Mtwara, participants undertaking communal labor for harvesting were provided with food and allowed to take home pieces of left-over cassava. No cash payment is provided to those who participate in this communal activity.

Men are dominant in marketing in the Lake Zone and in other zones more men than women are involved in agricultural trade, selling cassava, fish, cashew, rice, maize and sesame.

In all villages, women tend to play greater roles in household activities. Responsibility for family health care, appears to be shared, however, child care duties and water and firewood collection still fall mainly on women although these roles are beginning to change. In the Southern Zone where water is scarce, women can struggle in carrying out these roles. However, despite these changes, men are still dominant in relation to land ownership and control and decision making, particularly the utilization of incomes from family farms and or other income generating activities, including those of women.

Gender roles are changing however, particularly with the increase in female-household headship in the county. For example, in Fumagila village (Mwanza) women reported that about one third of the households are headed by women. These include widows (90%) and a few mature women who are not married but have children. Nationally the percentage of rural households which are female headed has increased from 16.7% in 1991/92 to 23% in 2007 (Household budget survey 2007).

Table 3 The Gender Division of Labor in cassava production

Activity	Lake Zone				Eastern Zone				Southern Zone			
	Men	Women	Children	Hired	Men	Women	Children	Hired	Men	Women	Children	Hired
Land clearing	✓				✓			✓	✓			
Land tillage	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Ridging	✓	✓	✓	✓	✓	✓	✓	✓				
Planting	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
Weeding first	Information missing				✓	✓	✓		✓	✓	✓	✓
Weeding second	Information missing				✓	✓	✓		✓	✓	✓	✓
Harvesting	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Transporting from field	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
Peeling cassava	✓	✓	✓		✓	✓	✓		✓	✓	✓	
Soaking cassava						✓	✓		✓	✓	✓	
Washing cassava		✓	✓		✓	✓	✓		✓	✓	✓	
Drying cassava					✓	✓	✓		✓	✓	✓	
Chipping cassava						✓			✓	✓	✓	
Fermentation with cover		✓	✓		Not reported in this Zone				Not reported in this Zone			
Uncovering, raking, fungus removal	✓	✓	✓	✓								
Drying of fermented cassava		✓		✓								
Storage in bags		✓		✓	✓	✓	✓		✓	✓	✓	✓
Marketing	✓				✓	✓			✓	✓		
Child care	✓	✓	✓			✓	✓	✓		✓	✓	
Health care	✓	✓	✓		✓	✓	✓	✓	✓	✓		
Water and firewood collection	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓

Source: Based on focus group discussions with farmers and groups in the three regions.

4.1.2 Youth

The study revealed that youth have a low level of interest in farming, unless payment for their labor is immediate. The NGO UPT in Mwanza reported that youth 'have nothing to say' in meetings if their fathers are present and would rather escape to the towns than work on the farm. Many of the youths selling various goods on the streets of Dar es Salaam are from the Southern Zone. Juma (2007) argues that in rural Tanzania 'young people are motivated to start their own business and create their own employment, because the chance of finding jobs in the current labor market are so limited, however they lack support.... such as, availability of investment capital, risk absorption capacity, know-how in terms of financial management, enterprise development and market accessibility'. Youths' capacity could be strengthened to improve their opportunities for adding value to cassava as a money-making enterprise. A communication strategy would need to be tailored and packaged differently for youths in order to raise awareness of opportunities.

4.1.3 Situation of Vulnerable and Disadvantaged Groups and Households

Different definitions were given by communities in relation to poverty and vulnerability. Three broad categories of vulnerable people in rural communities were identified;

- Men and women who are physically capable, but for various reasons, do not engage in agriculture. In some areas this was explained as a cultural preference for urban wage labor over farming.
- Men and women who are not physically strong enough to participate in agricultural production because of their age, sickness and or physical disability.
- Individuals who are very poor and do not have money to undertake agricultural activities or contribute to group effort.

Examples of the first category were given in Southern and Eastern Zones. For example, in Namichi village, Masasi district, respondents indicated that there were men and women who were physically strong but for unknown reasons they did not join fellow villagers/ community members to grow cassava. In Rufiji, we were told that there was a small ethnic group known as 'Wadengereko', who could be categorized as vulnerable. Although, land is available in Rufiji, the Wadengereko do not choose to earn their livelihood from farming. Many of them migrate to urban areas, notably Dar es Salaam, to look for casual work as local hotel attendants (mostly men) or domestic servants (mostly girls).

Relatively few cases of people living with HIV/AIDS or disabilities were mentioned. In the Lake Zone, HIV/ AIDS was said not to be a major issue of concern because not many people were affected with the disease in the region. The elderly were recognized to be among the most vulnerable in all areas.

Discussions in all three Zones identified the poor who do not have money to support agricultural activity as a vulnerable group. In Southern and Eastern Zones, communities reported that actual access to land was not a problem; both men and women could access village land individually or in groups as long as they made a request to the village land committee. In villages visited in the Eastern Zone, respondents said there were very few groups of people who could be categorized as vulnerable or marginalized. Land was available for anyone old enough to work in agriculture, whoever wants to use it, including women, youth and migrants. The example was given of migrants from Kilwa and Ikwiriri districts (Wangido) who migrated to Rufiji as hired laborers, but later some settled permanently, acquired land and took up cultivation of various food crops such as cassava, maize and paddy. Pastoralists from Shinyanga and Tabora regions have also migrated into the Rufiji area looking for pastures for their animals. According to DCDO, Rufiji District, "No records of land

conflicts have been recorded in our District despite a high influx of ethnic groups such as Sukuma's and Ngindo's from neighborhood regions. We are living harmoniously and peacefully". A similar account was given in Lake Zone concerning migration of Sukuma and their livestock to Mara region, without problems.

For these reasons, most respondents defined poverty and vulnerability in relation to actual ability to utilize land rather than to access it.

In Mbawala village, Mwanza district, a poor person was defined using three indicators:

- Having no farm
- Eating one meal per day
- Cannot raise any money to join a farming group.

In Bungu village, Rufiji, any household cultivating less than one acre of any crop was considered as poor. Interestingly, it was reported that about 10% of the total households in Bungu village were poor, including both male and female headed.

In Mbuga village, in Morogoro region, people reported that women used to be vulnerable because they could not access land. This culture has now changed and both men and women can access land now.

The various meanings of poverty and vulnerability cited by respondents are similar to those indicated in Tanzanian employment policy which states that "*poverty is a state whereby no income is earned from any source less income which is inadequate for normal livelihoodleads to a miserable life and it is women, youth and disabled who are the most vulnerable*" (GOT, 2004).

In the communities visited there was awareness of the need to include in development plans, women, the poor and people with special needs such as the physically disabled and people living with HIV/ AIDS without any discrimination. This is partly due to traditional norms at household level and also government and NGO policies and programs that seek to encourage the participation of women and the poor. In Mwanza, there is an NGO known as KIVULINI, which advocates for the rights of vulnerable groups and women.

However, it is a challenge to realize these principles in practice. There may be challenging trade-offs between achieving speedy implementation of programs and ensuring social inclusiveness. For example, RUDDO, an NGO working with farmers groups and multiplication of cassava cuttings in the Lake Zone, considers all farmers eligible to get cassava cuttings, regardless of their gender and that the poor are also given special attention. However, to get cassava cuttings, each individual must have a well prepared farm. Most individual farmers were not able to meet this criteria and that only 20 out of 100 individuals qualified in the initial round. No details were available on the gender composition of these individual farmers.

It is important for programs to gain understanding of the situation and capacity of women and disadvantaged groups in order to set eligibility criteria for their participation (e.g. contributions in cash or kind, land cleared, membership dues, materials etc.) at a realistic level. Without these considerations they could be effectively excluded.

4.1.4 Access to and Control of Assets and Resources

4.1.4.1 Access to land

The most common methods of gaining access to land are through customary law, buying, or renting; however there are differences in men and women's entitlements and experiences in these methods. Discussions at community level explored the relative

extent of men's and women's access and control over assets and resources both at community and household levels. As indicated previously, access to land was generally not considered a problem in most of the locations visited, but difficulties were reported among some social groups. Depending on whether the inheritance system is patrilineal or matrilineal, women's access to land is either through their husbands or parents. They can also access land through village leaders, or through purchase or rent. Youths access land through their parents, or village leaders.

Most villages in Mtwara Rural District are matrilineal and in these communities it is the women who inherit access to major resources such as land. Additional requirements for land can be met through renting or application to village councils. However, in terms of making major decisions on agricultural activities, it is the maternal uncles who must give consent. Women are also limited in their ability to purchase or rent land due to poor access to credit and lack of collateral. In the villages visited, both men and women had access to land and respondents said that vulnerable members of the community could also be given land by the village authorities. In Newala village it was reported that land was not a constraint in the village, and if anyone or any group wanted additional land to farm, they put a written request to the village government, who would meet and decide on the proposal.

In some villages (e.g. Mbwala) it was reported that disadvantaged groups such as the absolute poor and migrant laborers have difficulty accessing land. However, the main constraint is the lack of means to make use of the land.

In the Lake Zone, land access is closely related to the type of household. Men control land allocation, and therefore married women can access land through their husbands. Households headed by unmarried women, with or without children, can access family land for cultivation in their natal village, but widows residing in their deceased husband's village often have problems and are sometimes chased away by the husband's family including in-laws and close relatives (according to the NGO KIMKUMAKA).

In the Southern Zone there are important variations in land access within the Zone. For example, in Msijute village located near the coast in Mtwara Rural district, 75% of households had less than two acres of land compared to Mpanyani village further inland in the same district where 55% of households were estimated to have more than 5 acres of land. In Masasi, land holdings vary between 2-10 acres per household.

Farmers in Pwani region, Eastern Zone, reported that the average area cultivated per household was two acres, but there were some men and women who owned less than that. At the same time, there were some women who owned larger areas of land; up to five acres. Widows and children inherit family estates and other property depending on both customary and religious practices. Sometimes women buy or rent land. In Rufiji district, women generally move to their husband's village on marriage where they are allocated land by their husbands. A person with more than 10 acres of cassava is considered well off, while a poor person might have ½ to 1 acre of cassava. Some households, particularly migrants into the area do not have land.

Farmers in Biharamulo village in the Lake Zone in reported an average of 2 acres per household. In Fumagila village in Nyamanga district there seemed to be a different perception of land availability between women and men. Women reported an overall shortage of land whereas the men suggested that 75% of the population had 3-5 acres of land. Most of the land under cassava cultivation is operated jointly by men and women as family land. However, women are allowed to access some small pieces of land ranging from ½ - 1 acre of land where they grow sweet potatoes and vegetables. Men's access to land is mainly through inheritance, purchase or renting (about 50% of

farmers). Purchase costs are 10 million Tsh per acre and leasing costs are 50,000/= Tsh per acre, which means that access to land by poor people is a problem.

A National Bureau of Statistics (2003) study found that nationally, women headed households relied on customary law and borrowing to access land, while more male headed households had bought land and were holding land ownership certificates. At national level, male headed households had 1.1 hectares more land than female headed households. The lowest difference was reported in Dar es Salaam (0.3 hectares) and the widest difference was noticed in Tabora, with a difference of 2 hectares in favor of men.

4.1.4.2 Access to credit

Lack of access to credit was seen as an important constraint preventing further investment in agriculture and increasing production. Farmers, particularly female farmers, have difficulty accessing formal credit for agriculture mainly due to lack of the required collateral, with the exception of those who are members of savings and credit societies -SACCOS. Membership of SACCOS does not depend on sex and husband and wife can be members at the same time. New members pay a fee of 10,000 Tsh. Loans are repaid on a monthly basis within a full year. An interest rate of 10% is paid to the bank and another 10% to SACCOS, bringing total interest to 20% on principal.

On the other hand, informal credit (amounts of around Tsh 2000) may be accessed to address short term problems like sickness, but rarely for agriculture which is considered a long term investment. In the Southern Zone some villages reported a very high proportion (90%) of community members involved in informal borrowing.

The women in Mbuga village, Ulanga district described the 'merry-go round' system of savings which is very common throughout Tanzania. This tends to operate in groups of 10 women, who each put in Tsh 1,000 per week and then each member in turn gets to take home the money.

In Mkuranga District, all members of the Muhogo SACCOS have access to credit. In Rufiji District, it was reported that the District has established a savings and credit association but it is only men who are in organized groups are supported. The men stated that they collaborate with their wives to start various projects such as poultry, horticulture, and small scale cashew nut processing groups. Similarly, in the Lake region there were problems of accessing credit (Nyarubungu Outgrowers Association). The farmers considered that access to credit through NGOs and government institutions was easier for highly educated men and women entrepreneurs and group leaders.

4.1.4.3 Mobility

Infrastructure and transport facilities vary with location. Economic, social and cultural circumstances also vary between households and individuals. For example, in many households in rural Mtwara, women are less mobile than men because of the time constraints imposed by their multiple duties. They lacked the means and resources to travel. In addition, it was said to be culturally unacceptable for a woman to spend a night away from home without her husband.

4.1.5 Cassava and livelihoods

In this section we examine women's and men's current livelihood patterns and the role and importance of cassava. Farming is the main livelihood activity for rural men and women in all three Zones, but particularly important in the Southern and Lake Zones. A

higher percentage of women than men are employed in agriculture in both Southern Zone and Eastern Zones

Table 4: % of men and women employed in agriculture (in the 12 mths preceding the survey)

ZONE	Southern	Lake	Eastern
Men	84.5%	81.3%	34.3 %
Women	90.4%	81%	44.6%

Source: Tanzania Demographic and Health survey 2004/05 <http://www.nbs.go.tz/dhs/index.htm>

In all the Zones, many families keep some livestock for both food and income generation purposes; cattle, sheep and poultry. In Nyamichi village in Masasi District, approximately 60% of men and 40% of women keep livestock. In communities near the lake or in coastal areas, fishing is important.

The importance of cassava in people's livelihoods overall was high, particularly as a source of food security and cash income, but the extent varies by location.

4.1.4.1 Food security

Food insecurity is a major issue of concern in most rural areas in Tanzania. This is due to unpredictable rainfall, poor equipment, such as the hand hoe, limited skills in modern crop husbandry and the poor infrastructure. A study undertaken by the Tanzania Bureau of Statistics found that a higher percentage of female headed households were more likely to face food shortages. The problem of food security may perhaps be more prominent in the Southern Zone where there are water shortages. Cassava plays a significant role in household food security. Most households have a food security strategy, where a portion of the yield from their cassava farms is reserved for use during difficult times. It is evident that some communities have strategies to ensure self sufficiency in food availability throughout the year.

In the Eastern Zone, cassava became an important crop during the famine years. But with changes to cassava activities over last ten years, it is being now seen as more of an income generating crop.

We also found that farmers, including both men's and women's groups in the Southern Zone, grow several types of cassava varieties including sweet and bitter varieties. The sweet varieties are more popular than the bitter varieties, but the bitter varieties were said to be more resistant to pests and wild animals and they also give high yields and store better in the ground than the sweet varieties. Respondents in some villages also told us that some households grow sweet varieties which they eat raw as a snack without the soaking and sun-drying. There is a common belief that the cyanide levels in sweet varieties are less compared to bitter varieties.

Cassava is consumed as a main staple food in almost all household regardless of type, class and ethnic origin. In Ukombozi women's group, we were told that, in most households, they take cassava porridge for breakfast, *ugali wa kisamvu* and fish or soya beans as lunch and the same for dinner. At the same time, we found that a high proportion of households have only two meals per day.

4.1.4.2 Importance of cassava for food and income

In the Southern Zone, cassava was the overall most important food crop and in the communities visited, it was ranked No. 1. Cassava was also reported as a source of income, ranking between 2nd and 4th in importance in the villages visited. Other crops such as maize, millet, cowpeas and rice are also grown as both food and cash crops. In some villages, such as in Nyamichi village in Newala District, high value crops such

as cashew, sesame and groundnuts are the main cash crops. Cashew is the most important overall source of crop income in the Zone, but cassava is clearly also important.

In the Lake Zone, cassava was ranked first or second as a source of food. In addition to cassava and maize, food crops such as beans, groundnuts and banana are grown. Cash crops include tobacco, rice, gram and coffee. Cassava was listed as a source of cash in some villages. Sweet potatoes are grown as a food and cash crop mainly by women.

In Eastern Zone cassava was ranked as the number one food crop in communities in Kibaha and Mkuranga districts and by Sululu processors group in Rufiji district. In Mbuga village in the remote district of Ulanga in Morogoro region it was ranked fourth as a source of food. Its importance as a cash crop depends on its place relative to perennial crops such as cashew and citrus which are important sources of income in the locations where they are grown.

4.1.4.3 Non-farm rural income

In most rural areas of Tanzania people survive by doing many different things or activities in addition to farming as a way of complimenting household incomes. Both men and women engage in various income generating activities both in agriculture-related and non agricultural activities. This involvement is not restricted to type of household (male or female headed), location (rural or peri urban), sex, ethnicity, or marital status.

Cassava is grown not only by individual men and women at household levels. In the Lake Zone, we found two entrepreneurs who are involved in cassava production and processing, and in Southern and Eastern Zones there were a number of farmer processor groups producing cassava flour for sale.

In all sites, we found that rural communities also rely on other short term rural non-farm activities. Although farming, including livestock rearing, is the main livelihood activity for women, a small proportion of women (25% of women in Mbawala) are engaged in other income generating activities including self employment in petty trading or craft work (e.g. trade in dried fish, cassava, mangoes; weaving mats and baskets, making clay pots, braiding hair, and tailoring), see Table 5. In some villages, such as Mbawala and Nyamichi, some men are also involved with activities such as charcoal making, masonry and carpentry, bicycle repair and petty trade, while those with education are employed as teachers and nurses. In the rural areas visited in the Southern Zone, there were no reports of household members employed as factory workers. In contrast, in peri urban areas, such as those in proximity to Mwanza in Lake Zone, there were opportunities for industrial employment in factories, for example in soft drinks factories and Nyakato steel industry. Some of those with education – and mainly men - were employed as civil servants.

Table 5 Livelihood strategies in the Southern Zone: Mbawala Village

Type of Livelihood in %	Proportion of people involved	
	Men	Women
1. Farming	100	100
2. Fishing	25	0
3. Trading	25	25
4. Artisan	25	25
5. Factory workers	0	0

4.1.4.4 Gender and trends in cassava production

In different Zones the areas planted to cassava vary according to the relative importance of the crop and the availability of land and resources for production.

In Southern Zone, farm sizes were between 2 and 10 acres per household, although there are households which have more than this (e.g. Mpanyani village). In Eastern Zone, farmers in Pwani region reported that they held up to five acres, while in the Lake Zone, farm sizes were between three and five acres. The average area of cassava planted is around 2 acres per year per household.

In order to find out patterns and trends of farm sizes, respondents were asked to indicate the sizes of their cassava farms by comparing last year and this year's farming seasons. The findings indicated significant gender differences both across and within respective villages. In Mbuo village, some women indicated that they did not grow any cassava last season because sickness, or having no farm of their own. In contrast, some men indicated that they increased cassava farms by over 100%. This implies that although cassava production at village is increasing, there are significant variations between farms cultivated by men and women.

Additionally, in all sites, both men and women tend to intercrop cassava with other crops such as maize, cowpeas, groundnuts, sorghum and pineapples. In view of this, it was not easy to get information on yields per acre because cassava is not grown alone neither is it harvested at all at once. Harvesting is mostly done piecemeal.

In discussion of the reasons for an increase or decrease in the cassava area compared with the previous season, it emerged that the land area under cassava cultivation had not increased much either for men or women due to various reasons, including poverty and lack of markets. In most villages, farmers including both men and women expressed their intention to increase land under cassava production. However, they saw this as conditional on the following factors being in place:

- Good return for their labor
- Establishing cooperative or joint ventures to end exploitation by middlemen. Some middle men are buying 3 ton of cassava at Tsh 40,000/= which is very low compared to production costs.
- Sustainable markets which are easily accessible.
- Availability of credit and other support services such as hired labor.
- Processing centers are available within reach.
- Inputs are easily available

In most of the villages we visited, all the field tasks for cassava production are done manually, using simple implements such as a hand hoe and a cutlass.

4.1.4.5 Cassava Products

Over all sites there were five common forms in which cassava was consumed, including cassava leaves, fresh roots, dried roots (grits and chips) and traditional cassava flour. In all sites we found the following:

Firstly, in all households the consumption of cassava leaves as a vegetable (kizamvu) to eat with cassava stiff porridge, 'ugali wa muhogo' or rice is very common in all households regardless of type (male or female headed) income (rich or poor) level of education, age or ethnic group. Cassava leaves have a nutritive value similar to other dark green leaves and is an extremely valuable source of vitamins A (carotene) and C, iron, calcium and protein. The high consumption of cassava leaves in most households in the Southern Zone helps men women and children to acquire protein in addition to

the vitamins and minerals. It is the duty of the women and girls to prepare cassava leaves. Generally, cassava leaves are prepared by pounding them into pulp with a pestle and mortar before boiling in water along with groundnuts, and coconut juice or peas. This pounding, washing and boiling process eliminates cyanogens from the leaves and makes them safe for human consumption.

In most villages in the Southern Zone, women prepare *fresh roots* of sweet cassava for breakfast. In some families, men and women of all ages and ethnic groups eat raw cassava roots of sweet varieties as a snack between meals. Some sell it in order to get income. In all households, fresh roots of sweet cassava are roasted (mostly by women and girls) on an open fire while preparing food, or are boiled in water or fried in oil. The latter is common among petty traders (mostly men of all ages) who do it for sale.

Across the sites visited, most households (including male and female headed) cassava roots are processed and stored as dried roots. These dried cassava roots are locally known as *makopa* and are either stored in the house for later household use or marketed as chips, grits and traditional flour. There are two types of preparing dried cassava roots; one method involving fermentation and the other not fermenting. Fermentation is done through soaking of peeled fresh cassava roots for three to four days to enable the cyanide to come out. Afterwards, the fermented cassava is dried in the sun by both women and men. Non fermented cassava is not soaked, but requires peeling, grating and pressing to remove the cyanogens before sun drying. Most of these activities are done by women. Peeling cassava roots is particularly laborious, and it is estimated that the task has a labour requirement of 20 person days per hectare for cassava root peeling). Traditional cassava flour prepared without fermenting or grating/pressing is harmful because of the high content of cyanogens. Cassava grits or chips are milled into traditional cassava flour by women and girls at home by pounding with a pestle and mortar a few hours prior to the preparation for the evening meal. Some women's processing groups were making different snack products from the TCF.

4.1.4.6 Health and environmental issues in cassava processing

Respondents in village processing groups demonstrated some awareness of health issues relating to cassava. Several of the groups (e.g. Mbuo group and Jitegemee) had arrangements for directing the dirty water collected from washed or fermented raw cassava chips to a pit located at a distance from the processing area. Interestingly in Mpanyani village, households had ponds for the collection of rainwater for both cooking and drinking purposes. The water did not look clean, however, women from Ukombozi Farmers Group told us that the prevailing culture in the community was to boil the water from such ponds before use. These responses point to the fact that the women were knowledgeable about health matters. Further, a woman respondent from Mpanyani village in Mtwara told us they have adequate knowledge of sorting cassava leaves for making *kisamvu* by taking out those with cyanide. Nevertheless, the environmental issues and water quality could be significant constraints were the groups to upscale their operations in terms of daily volumes.

4.1.6 Power, decision making and gender relations in the household

In most sites visited, the ownership and control of resources at household level was articulated as joint ownership. Within households, women have a tendency to own kitchen equipment and utensils whereas men own farm inputs and implements. However, in households headed by women (widows, never married and mature women), it is women who own and control the resources. However, these women tend to own fewer resources relative to men and they tend to be poorer than their male counterparts.

Discussions at community level have highlighted the issue of control of income from sales of cassava roots and processed products. In most male headed households across the Zones visited, men are the key decision makers on income which is controlled and allocated by them. This appears to be the case even in matrilineal societies (in parts of Southern Zone) where women have more influence over land use. Socially defined gender roles, such as women's responsibility for food security, require high levels of agricultural and economic activity and the majority of their income is spent on household food and other essential items. Gender relations at household level are not static, and much negotiation and sometimes conflict occurs, in relation to access and use of resources.

In the Southern Zone, incomes from cassava sales in male headed households are controlled mostly by men and in most cases, it is men who make decisions on how incomes are to be spent. For instance, in Namichi Village in Nachingwea District, decisions on when to sell makopa (cassava grits) are made by men. Likewise, it is men who control incomes from makopa sales, but sometimes they involve their wives in deciding how to use the money. In most households, the immediate priorities are the purchase of school uniforms and household equipment. In other villages in the Southern Zone women reported that men would often sell food stocks without the women's knowledge, and women would feel unable to confront men about it because they would be threatened with divorce.

In Ukombozi Women Farmers Association in Mpanyani village, Mtwara rural which is matrilineal society, it is women who make decisions on various aspects of farming including farm sizes, types of crops to be grown for each season. When probed whether men make any farming decisions, the women responded "*the men are there to eat only*". *When you see a farm that is not well cared for, the blame generally goes to the wife/ wives.*" In this village, it was women who were responsible for food security as well as other basic household facilities such as kitchenware, clothes and community services. As a result of this, most women spend incomes from cassava to purchase food items particularly those which are not available locally such as fish and meat. Additionally, the women use their incomes from cassava to invest in utensils for their group enterprise, a roadside café and paying hired labor for clearing and tilling virgin lands.

An assessment of gender relations at household level reveals similar observations to those in existing literature by gender equality advocates. To most gender activists, household are areas of power struggle between men and women on various aspects including personal and family oriented issues. Most studies argue that the nature and character of gender relations in most rural households is not homogeneous neither static. In most households, including male and female headed, there is a lot of bargaining, cooperation, conflicts and contradiction. In the Lake Zone, men were said to be the key decision makers in male headed households particularly on family incomes and other family related matters such as education, house construction etc. The conditions of women's access to land show such contradictions in terms of their support to unmarried women, while imposing harsher conditions on widows. Demographic survey data from Tanzania illustrate the zonal variations.

According to the Tanzania Demographic and Health survey of 2004/5, the Southern Zone and Lake Zone have less than 50 % of employed women deciding on the use of their own income. This compares with 66.4% for the Eastern Zone and the national average of 60.1%. Rates are higher in urban areas. In the Lake Zone, joint decision making is as frequent as individual, while in the Southern Zone, for 36.9% of women the decisions were made by someone else. The decision making autonomy of women is highest on food and health care, and lowest on large purchases. These empowerment issues may relate to education as well as culture. The Southern Zone

and Lake Zone have higher %age of women without education and lower female literacy levels than the Eastern Zone.

Table 6: Women’s employment and control over income

	Southern Zone	Lake Zone	Eastern Zone	Urban	Rural
%age of women employed who decide themselves on use of their income	44.8	45.8	66.4	78.4	44.7
%age of women employed who decide jointly on use of their income	18.3	45.4	17.4	14.4	31.0
%age of women employed where someone else decides on use of their income	36.9	8.8	16.2	7.6	24.3

*Tanzania Demographic and Health survey 2004/05 <http://www.nbs.go.tz/dhs/index.htm>

While not completely separate from household dynamics, women’s involvement in groups for farming and/or processing, where decision making is done through elected committees (often all female in the case of women’s groups), which can provide an alternative channel to access benefits from their own labor. However, groups varied in the degree of skill and transparency with which their leadership managed group resources. In some mixed groups, leadership is dominated by men.

4.1.7 Planting materials, cassava diseases and cassava management

In the context of the challenge to cassava production posed by diseases such as cassava mosaic disease (CMD) and cassava brown streak (CBS) the access of farmers to high yielding and disease resistant planting material is very important.

In the Southern Zone, farmers in most villages indicated that they are getting cassava planting materials from various sources such as fellow farmers, government institutions and local NGOs working in their districts. For instance, in Mtangalanga village in Newala District, all farmer groups were given planting materials including individual farmers and most vulnerable people including widows. Most villages are growing traditional varieties including Nikonga, Nalikuchimba, Ntakane, Badi, Nakuchumba and Kigoma Mafiyi (Mbawala Village).

In the Eastern Zone, farmers are growing both sweet and bitter cassava varieties such as kiroba, Kibandameno, Kichoko and Kisawulo respectively. The last two types are bitter.

In the Lake Zone, respondents indicated difficulties in accessing enough of the right cuttings for planting. Due to the high prevalence of cassava diseases, smallholders farmers want to access tolerant varieties but the formal institutions responsible for providing such input, including Ukiliguru Agricultural Centre in Mwanza and NGOs such as KIMKUMAKA, are not able to meet the extent of the demand in one season. Conditions for distribution of cassava cuttings for multiplication may narrow the number of farmers eligible to participate. According to a RUDDO respondent, all individual farmers including men and women were eligible to get cassava roots, however, to get cassava cuttings, each individual must have a well prepared farm. Only 20 out of 100 individuals qualified to receive cuttings in the initial round.

4.1.8 Village farming and processing groups

Both farmers’ groups and processing groups at village level were visited (see Table 2 for names and numbers of informants). Discussions covered the social composition of

farmers groups and village processors' organizations as well as their organization and activities.

Experience in other African countries, particularly Ghana and Nigeria has shown that as cassava yields are boosted through improved varieties and agronomic practices, the crop labor requirements increase. Hired labor is expensive and often unaffordable for smallholder farmers and in this situation there may well be additional demands on women's labor time. Hence the need for establishing strong and efficient farmers groups becomes paramount. Farmers' groups for cassava production were considered to be advantageous in sharing the labor burden of production as well as accessing information. In terms of sales, there are opportunities for further income if cassava roots are processed into cassava products. Similarly, the labor requirement of processing and access to equipment is more easily provided through group membership.

A further important advantage of group membership is access to credit through group credit schemes. For example, in Eastern region, four farmers groups joined together to form a saving and credit organization popularly known as MUHOGO SACCOS with a total of 49 members.

Group activities are mainly collective farming and/or processing. In addition, some groups run small enterprises. Farmers' groups grow crops, particularly cassava, on their group plot, contributing labor and sharing the proceeds. Not all the processing groups met were active. Some were producing small amounts of high quality traditional cassava flour (HQTCF). Their main constraints were lack of information on markets as well as lack of equipment.

4.1.8.1 Group membership and organization

The membership of farmers' groups met during the study was relatively gender balanced. However, some processing groups have more female membership, building on women's traditional role in processing. For example, the Tanga Starch Processing Group had 20 women and 23 men and the Sululu Group had seven members, four of which were women. The group leader (chairperson) was usually male, whereas supporting leadership (treasurer and in some cases the secretary), were women. Women's groups in particular can provide opportunities for women to participate in leadership and decision making, increasing access to equipment and forwarding women's strategic interests.

Most groups require their members to pay an entry fee and a regular contribution. This varies significantly in different areas of the country and with the extent of group development and profitability. In Eastern Zone the entry fee for the Jaribuni Mpakani group was 20,000/= whereas for the Sululu group it was 50,000/= Tsh. For the latter, the entrance fee has just been raised to Tsh 500,000/=. This amount has been set so high purposely to discourage less committed people from joining the group. In contrast, in Southern Zone, the members of the Jitegemee Women Farmers Community Processing Group, are required to make an annual contribution of Tsh 2000/= and Tsh 500/= per person per month. In Namichi village processing group (comprising 3 men and 1 woman,) the group has set rules for new entrants. According to those rules, a new member wishing to join the group is required to pay Tsh 50,000. In this case too, the high amount was purposely set in order to discourage new entrants from joining the group.

Most groups met during the survey have clear leadership structures, with a chairperson, secretary and treasurer. In some Southern Zone village groups such as those in Mbawala and Namichi there was a 'guardian' who is responsible for overseeing the smooth implementation of the main group activities. The general

practice was to elect members for different roles using defined criteria. For instance, Ukombozi women group they told us that for any person to be voted for any leadership position she or he must have the following qualities: the ability to read and write, be socially acceptable and possess other specific qualities such as being hardworking and full time in the village. This is because the leadership is expected to be the main 'think tank' and the key decision makers for the group. In order for the leaders to be effective, group members establish participatory structures. Some of these include weekly meetings where group members meet regularly to deliberate on important group matters affecting the groups such as farming, division of labor etc.

Women were well represented in group leadership in groups which had a majority of women members. For instance, in the Muungano Cassava Processing Group at Mtangalanga Village in Newala District comprising 9 women and 2 men, all the leadership positions including chairperson, secretary and treasurer, were women. The same was the case for Jitegemee Farmers Group in Mbawala village, Mtwara District; with a membership of 12 women and one man; all the leadership positions were held by women. The Ukombozi farmers processing group was established in 2004 with ten members but four dropped out at different periods. Most are in the age range of 24 – 34 years. All are married except one who is a widow. Only two have been to school (one who completed class four and the other class seven). These two women are the group treasurer and secretary respectively. The Chairperson has not been to school but she is very active and dynamic and she has successfully managed the group at its formative stage.

However, in the mixed farmers' processing groups the chairpersons were men. Women were elected as treasurers (Mbawala Village) and another woman in the same group is the guardian. The Jitegemee Farmers Group was established in 2005, the tenth anniversary of the fourth International Women Conference that was held in Beijing in 1995. It was also the year of general elections for the Presidential and Parliamentary elections in Tanzania. During that year there were a lot of campaigns promoting women's access to leadership positions. It is not stated whether women were elected into those leadership positions because of the two factors or it was purely a coincidence.

Most groups have regular meetings to plan and discuss their activities and organize labor allocation. For example, the Jitegemee Farmers Group members meet twice per month to discuss cassava farming, their milling business, how to increase land under cultivation as well as the division of farming responsibilities including how much time to spend in individual and collective farms respectively. Specific days are usually allocated for group activities. The group imposes fines for members who are late (500/-) or do not attend meetings and group activities (1000/-). By employing those measures and penalties, the group said that it has been able to stay together without any difficulties.

In the Lake Zone, the Busaka Processing Group (Chato District) was established in 2005, as a savings and credit organization. When members were asked about the strength of their group, they cited good management as one positive factor among others. The group is chaired by a man, but both the secretary and treasurer are women. Altogether there are nineteen members, the majority of whom are women (17 out of 22). They have been working together for almost four years, without any conflicts. On the other hand, the women respondents from the same group told us that more women than men have dropped out the group for variety of reasons. Some of these include failure to comply with the conditions set by the group, such as regular participation. This is likely to be a reflection of the demands on women's time arising from the demanding combination of their productive and household reproductive roles such as food preparation and child care.

In Fumangila village, in Nyamagana District, Mwanza Municipal, we found that the village chairman is also the chairman of the group. He is assisted by a secretary (a man) and treasurer (a woman). In Nyarubungu Outgrowers Association, we were told by both the group deputy chairperson and group secretary (both men) that at times, some married women are banned from attending group meetings due to 'misconceptions about the role of women in development'.

4.1.8.2 Group management of resources and allocation of benefits

Discussions at group level explored the level of resources owned by the farming and processing groups and how these were managed between men and women. The sharing of benefits among group members was also discussed.

UPT reported challenges of low attendance (limited by household duties) and low participation of women in village meetings in Mtwara (cultural norms that make it unusual for women to speak in front of men). Concern Worldwide also illustrated challenges through their experiences of community based processing groups with all female membership in Mtwara. The assumption was made that the groups would do their own marketing, but after they had marketed their produce at shows and exhibitions there was no more active marketing. One factor was that husbands would not allow their wives to travel without them. Another assumption was made that with basic training, groups would maintain their equipment. This didn't happen, e.g. in Njengwa village the milling machine no longer functions because oil wasn't added to the engine. Many of the graters also no longer function because of a lack of maintenance. In response to this, the Mtwara Rural Council then revised their plans. Youths were identified and were attached to each machine to carry out maintenance operations. However, getting fuel was a problem. The Council then thought of developing a network of processor groups to facilitate mutual support. This didn't work for a number of reasons; women didn't have the time available because of their multiple duties; the lack of resources to pay for travel; and culturally it was unacceptable for women to spend a night away from home without their husband. It is critical that in implementing activities there is a shared understanding of the context, motivation and incentives which will influence key target groups.

In the Eastern region, groups indicated that their members had equal access to group resources and that benefits from their joint labor were equally shared. The Sululu Farmers and Processing Group was established in 2000 with support from the International agricultural research centre, IITA in collaboration with SARNET to improve farmers' livelihoods through the production and marketing of cassava flour. The group owns a five acre cassava farm. In addition, each member owns their individual or family farm ranging from 5 – 8 acres per household. Moreover, group members have access to processing equipment including the processing shed, store, drying tables, motorized cheeper and a grater. This equipment was donated by IITA.

The Majaribio community based processors group at Jaribu Mpakani currently involved in cassava production was established by a local NGO, SSMalongo, who advised community members to start an experimental farm known as "Majaribio farm" in order to grow tomatoes, which never took off. However with the support from IITA and TFNC in 1999, the Jaribu Mpakani group started growing cassava. The group was given support for construction of a building to house cassava processing equipment. As in other groups, the members divided income from sale of cassava products among themselves as dividends. Group members were given between Tsh 20,000 – 30,000/= per year as dividends in the first year. However, part of the group income is used to pay membership annual fees and or entry fees. Group members have bought basic household gadgets such as radios, bicycles and mobile phones.

In Soga village, in Kibaha district, it was reported that some farmers use their incomes to pay for hired labor. In the Sululu Group, it was reported that last year (2007/08) each group member got Tsh 300,000/= as a dividend at the end of the year. Most of this income was mainly used for payment of school fees and house construction, thus signaling improvement in living conditions. In the case of Mbuga Male Farmers group in Ulanga district, we found that the group used their income for covering various costs incurred in cassava activities as follows:

Table 7 Costs of cassava operations, Ulanga district.

Operation	Cost per acre (Tsh)
Land clearing	40.000
Burning	20.000
De-stumping	50.000
Tillage	35.000
Planting	10.000
Weeding 3 times	63.000
Harvesting	40.000
Peeling	10.000
Drying	10.000
Transporting from field to home	60.000/
Storage	15.000

In the Southern Zone, group property such as milling machines, buildings and processing equipment, belong to the group. However, different groups have different arrangements for accessing the group equipment. For instance, in the Jitegemee and Ukombozi women groups, only members are entitled to use group property for individual household needs. The Jitegemee group indicated that they owned a grater and pressing machine which they were given by the Mtwara District Council in 2005. Both men and women are responsible for operating the machines. In terms of benefit sharing, each member got 10,000 Tsh in the first year as dividends from group income while in the second year they bought additional equipment for use during cassava flour demonstration events. In the third year, each member got Tsh 5000. The group has no access to any form of credit support. They have planted 1.5 acres of cassava which is intercropped with bambara nuts and rice. Additionally, each group member has a family farm ranging from 0.5 – 10 acres of land where they grow cassava, millet and upland rice.

The Mbuo Women Processing group was established in 2004 by Concern Worldwide. They owned a cassava grater, milling machine, buckets, kitchen and modern cooking utensils which were provided by Concern worldwide. Additionally, the group has a bank account. However, this group had stopped processing HQTCF mainly due to management problems within the group.

Group resources are sometimes used to raise money by providing services for other villages. In Msijute village, for instance, the women processing group used to mill cassava for neighboring communities. However, in this group some minor problems were reported including theft of processing equipment such as buckets, and mismanagement of incomes from sale of cassava due to lack of transparency and management skills.

The Ukombozi Women Farmers/ Processing Group have just started and they are yet to receive any dividends from working together in cassava production and processing. The group has a small café or kiosk where they sell food and various products made of cassava flour. Two women work in this kiosk on rotational basis. When on duty, such

women are not obliged to do any farm work in the family or group cassava farms. They are allowed to consume leftovers.

4.2 GENDER DIVERSITY AND COMMUNICATION

4.2.1 Sources of agricultural information

Women and men's local knowledge of their farming system allows them to manage their cassava generally in a low input / low output system. Men and women indicated that they have adequate knowledge and skills on how to grow cassava in their own fields which they inherited from their fore fathers and mothers respectively.

Women respondents from Twijube Outgrowers Association reported that, *“we got information from our parents. When we were small children we used to work together with our parents in our family farm. This is how we acquired knowledge on how to grow and process traditional cassava flour (oTCF)”*.

However, for most farmers, further knowledge would be needed to gain the maximum benefit from improved planting material and disease management and to adapt to, contribute to and benefit from cassava/HQCF value chain opportunities.

In village level discussions, men and women farmers and processors were asked about their sources of information on issues relating to agriculture and in particular cassava production and processing. Important sources of information for women are through village meetings and from NGOs. Those who are members of farmer or processor groups are more easily able to access information from NGOs and government actors.

This was the case for farmers visited in Mtwara rural. For instance, in Msijute village, although it was not clearly stated, it appeared that the NGO Concern Worldwide was their main source of information and external resources. The majority of the remaining community members got information from the few traders who are operating in this village. The women's group in Mpanyani village received information and training from the UPT female community mobiliser. Access to information from outside the village was limited for women since in most households women are less mobile than men; women do not have the time available because of their multiple duties; the lack of resources to pay for transport; and the cultural restrictions on a woman spending a night away from home without her husband.

In the Lake Zone, discussion with respondents in all sites visited illustrated the different avenues of information accessible to men and women. At village level (e.g. Fumagila Farmers Processing Group and Association, Kagera region), both men and women accessed information in meetings organized by the village government. NGOs such as RUDDO and CRS provide specific information to both men and women farmers and processing associations located in the respective sites. As far as access to information on tolerant cassava varieties, the NARS, Ukiriguru and NGOs involved in cassava promotion such as GLCI, RUDDO, and CRS, are the main sources mainly responsible for this. As a strategy to reach the community they promote the establishment of farmer groups - either men only, or women only, or joint groups. Through such groups, comprised of not more than 25 members, these NGOs and government actors at district level are able to disseminate different types of information on cassava production and processing. Information on cassava production and processing is shared in meetings that are held on a regular basis. For the Busaka processing group, and Fumagila women group, discussions on cassava production and processing is one of the agenda items in the group meetings.

Two entrepreneurs (1 female and 1 male from Mwanza and Mara region respectively), indicated that they obtained information from the electronic media, in particular the

television and additional information was obtained from government institutions such as the NARS, Ukiriguru in Mwanza as well as local/ regional NGOs such as RUDDO, KIMKUMAKA and GLCI. The Mennonite Church gets information from its links with local and international organizations such as the District Councils in the three districts in Mara region and Danish government.

In the Eastern region, two groups visited, Soga farmers group and Muhogo SACCOS group had received information from the NGO TADENA on value addition.

4.2.2 Access to media

Various communication technologies offer potential for improving farmers' access to information relating to cassava; yet access to modern media – radio, mobile phones, TV etc. tends to be less available for women and girls in comparison to men and boys.

Radio is the main option currently available in rural areas - television is currently limited. Men have access either through direct ownership or through meeting at trading posts which have TVs. Women are less likely to own such equipment and do not socialize in public places or bars which have TVs.

Mobile phone ownership was high in some locations and with some groups. In villages visited in the Southern Zone, mobile ownership was lower than in the Lake and Eastern Zones. In Msijute villages, a few men and women had access to mobile phones, radios and television, with more men than women having access to other resources such as mobile phones, television and radio. Msijute village is located 20 minutes from Mtwara town. However, women in Msijute had greater access compared to the group in Mpanyani village (about a 2 hour drive from Mtwawa) where none of the women had access to such resources. In Mbawala village, a few male heads of households had mobile phones and radios.

In Eastern Zone, it was reported that a few households had TVs, nearly 50% of all households have mobile phones and nearly 100% have radios. Here too it was reported that men have better access.

4.3 MARKETS, INTERMEDIARY PROCESSORS AND END USER INDUSTRIES

Information on marketing was explored at village and group level and with entrepreneurs and traders in the cassava value chain with a particular focus on the role of women in cassava markets and trade.

4.3.1 Marketing and linkages at village level

In the Southern Zone, it was generally the case that both men and women farmers groups, as well as processing units were poorly linked to external markets outside their respective villages, districts and regions. A large proportion of cassava roots produced in Mtwara region is either consumed as food at household level or sold directly to local traders from Mtwara town during the harvest season. Cassava is processed into traditional cassava flour and/or HQTCF by the two women only groups Mbuo Women Processing Group in Msijute Village and Ukombozi Women Farmers and Processing Group in Mpanyani Village. Most of their sales were local, for example, the Mbuo Women Processing Group had put signboard advertising their products and prices. Flour was sold at Tsh 300/ kg. The Jitegemee group in Mbawala indicated that they are experiencing problems in selling the HQTCF because most people have their own home produced TCF which is prepared by women and children using traditional techniques including a mortar and pestle. They reported that the Mtwara District Cooperative Officer (DCO) normally invites the group to exhibit HQTCF and other

cassava products during the Nane Nane celebrations for farmers in Tanzania, which take place annually in the first week of August.

In the Eastern Zone, in Sululu and Jaribu Mpakani villages, farmers sell cassava products (both fresh roots and dried chips) to village traders or traders from Dar es Salaam. For instance, it was reported by Sululu Group, that fresh cassava roots are sold at Tsh 50/= per kg and both chips and HQTCF is sold at Tsh 400/= per kg at individual level. Sululu group also sell cassava grits at Tsh 400/= per kg in the village.

Prices reported by the Jaribu Mpakani group depended on the harvesting arrangements and product type as follows: Tsh 30/= per kg for fresh roots if buyers harvest them by themselves on the farm; Tsh 40/= per kg if the farmer harvests fresh roots by themselves and take them to the chipping site. Tsh 50/= per kg for peeled cassava brought by farmers to the chipping centre. Tsh 60 per kg if farmers provide extra services such as peeling and washing fresh cassava roots before taking them to the processing centre.

4.3.2 Intermediary processors, traders and End User Industries

4.3.2.1 Intermediary processors

No larger scale cassava processing enterprises were found in Mtwara Rural District. The few cassava processing mills in Mtwara town (Magomeni area) were privately owned by some few well to do men only. Interestingly we also found out that owners of these few cassava milling machines came from Nachingwea district in Mtwara region.

In the Lake Zone, there are different enterprises involved in processing cassava including male and female entrepreneurs. One of the female-run enterprises involved in cassava production and processing trade is the Hamida Mukasamro Plant Material Multiplication and processing enterprise which was established in 2006. In tracing the reasons that made this woman (a widow in her early fifties) to engage in cassava production and processing, we found that she picked the idea from a call that was made by the president of the United Republic of Tanzania concerning food insecurity in the Lake Zone and the problem of diseases that were affecting cassava production. Initially, she started with a small farm (about 0.5 acres) which was intercropped with other crops such as maize. However, four years later, she expanded her farm size to 15 acres and concentrated on cassava cuttings for multiplication purposes. At the same time, Hamida is also processes HQTCF and sells it to markets, including supermarkets in Dar es Salaam. Hamida is responsible for growing and processing cassava into HQTCF.

As the owner of the enterprise she employs a male supervisor who is supervising about 10 employees, (mostly women aged between 15 – 50 years from Kanyama village, Kissesa ward, Magu District). These part time (and/ or piece wage) employees) are paid different rates according to the task performed (clearing, cultivating, weeding, manuring, harvesting and preparing cuttings. She harvests 100 bags (70 kg per bag) per acre of cassava. After being processed to HQTCF, each kilogram is sold at 800/= Tsh wholesale price. Further we were told us that she does not have her own milling machine for processing HQTCF, but uses private milling machines located within Mwanza Municipal. Hamida's farm is located about ten kilometers from Mwanza city in Kasuno village. She has two raised-cement drying platforms which she prepared for 100,000/= Tsh each.

Discussions were held with another individual entrepreneur in Musoma Municipal, Rev. Bishop Ndege, Tanzania Mennonite Church, and Lake Diocese (NGO) who has also been involved with cassava production and processing since 2008. The church is involved with promoting both cassava production and processing as a strategy for

empowering members of his congregation (including both men and women) to raise income and get out poverty. Initially, the Bishop obtained financial support (about 26 Million Tsh) from the government through a program known PADEP for training people how to grow cassava. The money was used for training purposes including how to grow and process cassava into HQTCF. About 160 people were trained including 80 Mennonite church worshipers and 80 non- Mennonite church members, mainly Village extension officers. The church is operating in three districts namely, Bunda, Serengeti and Musoma Rural.

4.3.2.2 Milling Industries

In the flour mills, most professional chief millers were foreign nationals, observed to be mainly Indian or Kenyan. The majority of milling factory employees were male. Apart from women in administrative positions and the odd one in security, the majority of women were mainly employed in the packaging section, i.e. bagging and sewing (if flour is sold in small quantities to retailers). Women were also reported to be employed in cleaning jobs, i.e. sweeping floors. One miller explained that he only employed men aged between 21 and 55 years old in the production department because of the heavy work involved. Both packaging and cleaning employees were on casual contract basis. Most employers replied that this is because this type of work varied from day-to-day depending on daily work targets.

However, all employers, when queried about payment and other allowance differences, were quick to inform researcher that “daily workers have similar rights to permanent staff under the new labor law which defines labor conditions and rights of employees as well as minimum wage and leave allowance. Some employers said that they provided free food (e.g. breakfast if they were on a night shift) for their employees. However, Section 35 of the Employment and Labor Relations Act (ELRA) states that “Sub-Part E, regulation related to Unfair Termination of Employment, does not apply to an employee with less than six months of employment with the same employer, whether under one or more contracts”. Due to time constraints for this study, this issue was not explored further. However, from the above statement, it can be assumed that, even with the New Labor Act, casual employees, mainly women, still do not fully have the same rights as their permanent co-workers.

4.3.2.3 Biscuit Manufacturers

The biscuit producers interviewed employed about 130 – 150 staff (in one case this covered two sites). The factory managers reported there are more women employed in biscuit production than men. This applies in particular to packaging because this is considered “delicate work”. In addition, women are employed in administration (e.g. accountants, personal assistants, receptionists). However, they were reluctant to give specific information relating to gender.

Many factory owner encountered were of Indian origin. Other technical skill positions were taken by foreigners. Biscuit manufactures reported that they were also following the labor law, and that they allowed women to go on maternity leave. In one factory, the employer said that they only allowed women to go on maternity leave once every two or three years. Again, similar to flour milling employers, employees in the packaging department were typically on casual contracts.

4.3.2.4 Bread Bakers

Employees at bread bakeries were typically male. Only the cleaning and to some extent packaging (e.g. at a bakery in Mwanza) is done by female employees. At the same time, the bakery in Mwanza also employed female guards (“because they are considered reliable”). It was indicated that permanent workers had leave entitlement (including maternity leave). There were separate toilets for men and women located on

the premises. Bakery owners were reluctant to discuss wage structures. The bakery in Mwanza had 50 workers in total, 20 of whom were on permanent contracts and 30 on part-time working arrangements.

4.3.2.5 Plywood manufacturers

The only plywood manufacturing factory in Tanzania is located in Tanga. For starch, the manufacturer currently uses wheat flour as glue extender. When told about HQCF properties, the managers were interested to test it. However, the capacity of the factory was limited, with current starch use volume of 15-30 tonnes per annum, depending mainly on the supply of timber. Nowadays there is a shortage of timber in Tanga where the factory is located.

4.4 Factors Promoting or Hindering the Participation of Women and the Poor

Lake Zone:

- **Employment opportunities** - some individual entrepreneurs such as Makasamro Enterprises prefer to employ more women than men, which has resulted in increased women's participation in agricultural production, particularly cassava production, as hired labor. They do this to earn incomes to supplement their husbands' meager incomes (for those who are married) or as source of income as female household heads because they are the main bread earners. However it is important to note that women could be preferred because of their low status in the labor market that could be exploited.
- **NGO and church activities** – since the majority of church members in Tanzania are women, the plans of the Mennonite church to embark on large scale cassava production will also directly benefit more women than men. The church plans to cultivate 6,000 acres of cassava in Bunda, Serengeti and Musoma districts. Further in Mwanza region, there are NGOs such as KIVULINI and TAWLA that are directly advocating for women rights. In Kagera region, the NGO known as Rulenge Diocesan Development Department (RUDDO) is actively involved in facilitating the empowerment of men and women to participate effectively in development activities. They are concerned with environmental issues, health, social justice, including land resource rights, and rural income improvement. With the support of Village Extension Officers (VEO), RUDDO provides farmers with cassava cuttings for growing in one acre.
- **District Councils** – these promote women participation in farmers and processing groups. Although households have joint farm plots, women have access to their own plots where they cultivate cassava and other crops. Although these farms are smaller than those of men or families, they control incomes from such plots as well as spend the income as they wish without consulting their husbands.
- **Land access** - in some sites, a few women were able to increase land under cultivation by one or two acres whereas most remained static or even reduced the land they cultivate by up to 50%. In Mwanza municipal, Nyamagana District, the scarcity of land and lack of financial means to pay land rent was common. Most women cannot afford to purchase land. The cost of one acre of land has reached 10 million Tsh. These prices are high because this village is located about ten kilometers from Mwanza city. There are business people from Mwanza city who often go to the village to purchase land.

- **Leadership roles** - in some cases, access to leadership roles especially in mixed farmers groups is dominated by men. Basically, this is attributed to strong patriarchal culture that delegates leadership to men. This may discourage women's participation.
- **Cassava diseases** - over the past few years, cassava has been under attack by diseases such as the mosaic disease and CBD respectively. This has greatly affected farmers' morale, both men and women.
- **Processing technologies** – although some District councils and NGOs had provided processing equipment, a number of women's processing groups did not have the necessary equipment (graters, presses etc) to process in a timely fashion.

From the above discussions it is clear that there are a number of things that need to be in place for increasing livelihood aspirations and interest in cassava production and processing. These include among others responding to each of the above problems and challenges particularly improving market conditions and post harvest and processing technologies.

Southern Zone

- **Markets** – both men and women in all communities that were visited in Mtwara District expressed interest and commitment to increase land under cassava cultivation as long as there is an assured market. This was emphasized in Misijute, Mbawala, Mpanyani and Mtangalanga villages. A male respondent indicated that there is great potential for realizing the aspiration for greater involvement in cassava production and processing, for four major reasons, namely: the availability of land in the Southern Zone; the interest in expanding cassava cultivation, markets in Mtwara town and beyond, and accessible year round roads.
- **The main problems** were - lack of markets for cassava flour, inadequate marketing and business skills among women; high levels of poverty among the majority of the people particularly women; lack of electricity; lack of credit support from Formal Financial Institutions; inadequate knowledge on High Quality Cassava Flour (HQCF)

They are optimistic that if ensured of markets, adequate skills and knowledge on how to produce HQCF, they will be willing to produce and process cassava.

5. RECOMMENDATIONS FOR PROMOTING GENDER EQUALITY AND WIDER ACCESS TO OPPORTUNITIES AND BENEFITS FROM CASSAVA PRODUCTION, PROCESSING AND MARKETING

This section considers the findings above and highlights the main gender and social differentiation issues that should be taken into account during C:AVA/GLCI implementation in order that cassava production and processing can provide opportunities for extending women's participation and empower them and the poor financially and socially. The analysis is the starting point for developing specific targets for women's participation and benefit levels.

Awareness raising and communication

1. Mainstream gender sensitization into all activities targeting farmer/processing groups and community leaders. This should advocate for the sharing of responsibilities between men and women, and greater decision making and control

over income for women. Importantly, as cassava commercialization increases, women's participation and benefit from cassava needs to be maintained/or increased – along with ensuring that an adequate supply of cassava is stored in the home to ensure food security.

2. Awareness activities on the profitability and importance of agriculture, and specifically in cassava value addition, should be promoted among youth.
3. Ensure communication and training material is gender-friendly with regard to the format and content. The design and delivery of information should address the barriers commonly experienced by different social groups in accessing information (e.g. illiteracy, lack of fluency in English/Swahili, and limited access to radio and television). An effective method for information transfer is verbally, such as the ten-to-ten method, where ten women are responsible for telling ten women and so on.
4. Specific information should be included on women's land and natural resource rights and cassava-crop management.

Participation and equity

5. Ensure that an equitable proportion of the beneficiaries are women and youth, specifically encouraging youth groups to be involved in cassava production and processing and targeting a women's group for each mixed-sex farmer group. These groups should be linked with credit and technologies.
6. Promote women's active participation as leaders by providing targeted leadership training courses for women. Women should also be encouraged to take more prominent roles in group management, such as the chairperson, and also to support their girl children through school to improve their future opportunities.
7. Work with enterprises to create a more inclusive and supportive environment for their workers. C:AVA and GLCI should promote fair and equitable labor standards among all partners it works with.

Building local capacity

8. Undertake capacity building in group management for farmer/processing group leaders, targeting female leaders. This should include components on group sustainability and management, becoming more inclusive to meet the needs of women and vulnerable groups (e.g. content of meetings, reducing penalty fees for being late, criteria for selection, location, timing etc), and encouraging greater female leadership. Promote partnerships between farmer group members in order to assist each other in production activities. Group fees should be monitored to identify if they are acting as a barrier to participation.
9. Target women in a capacity building program on the technical aspects of cassava production, cassava disease identification and cassava processing. Training for women should also include working with technology and machinery to ensure that they are not limited to only working in their traditional areas. Capacity building should include crop management methods that can reduce the time spent weeding.

Access and control over resources

10. Cooperatives or joint-ventures should be encouraged among women's farming and processing groups to increase the ability of the group to access credit and technology and equipment.

11. Develop an equitable plan for cassava multiplication and distribution in order to increase access to material for the population in general, and particularly for women and vulnerable groups. This could include using farms of different sizes and/or well organized farmers groups for multiplication; targeted distribution plans; limiting criteria for participation that act as a barrier for some groups e.g. contributions in cash or kind, land cleared, membership dues etc.

Improve access to technology and credit

12. In order to prevent women's workloads from increasing with the expansion of production and commercialization of cassava, the following activities should be undertaken:
 - Partner with other organizations to disseminate labor saving technology (peeling equipment). Training in the use and repair of equipment will also need to be implemented, again targeting women.
 - Link with credit services in order to improve access to credit for farmers and village level processing groups to invest in equipment and hired labor (such as through SILC activities). This should be conducted alongside sensitization activities to ensure women have equal access and control over credit and income generated from investments.

Gender planning, monitoring and learning

13. Develop socially-sensitive and participatory monitoring and evaluation plans and impact assessment tools. This should be combined with capacity building for partners in use and analysis of the data collected.

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Appendix 1 Question Checklists

Checklist for Gender and Value Chain Analysis

GENERAL

EXPLORE STRATEGIC gender needs, e.g. training, skills, legal rights and empowerment as well as **PRACTICAL gender** needs e.g. time allocation and reduction of work load.

Analyse gender roles according to **PRODUCTIVE, REPRODUCTIVE** (in the social sense as well as biological, e.g. child care, domestic chores etc) and **SOCIAL/COMMUNITY** roles. (see Moser, activity profile)

Explore **ACCESS and CONTROL** of resources, e.g. land, income etc. How are decisions made? (Access and control profile and Influencing factors – Moser and Harvard framework)

Explore **SOCIAL RELATIONS** along the value chain.

SECONDARY DATA REQUIRED

- Information/data on gender in the national and district agricultural and agri business sectors, with particular focus on cassava.
- Gender roles - cultural construction of gender roles, influences of religion, traditional culture, history etc. Extent of convergence of factors resulting in marginalisation and social exclusion of particular groups
- Financial regulations, banking rules in relation to gender and credit.
- National labour law relating to enterprises of different scale.
- Local institutions and governance – who are the authorities at different levels – village, district etc. who influence decisions on expansion of cassava production and processing.
- Local status of health, (HIV/AIDS), nutrition and household food security - seasonal variation.

CROSS CUTTING ISSUES FOR DISCUSSIONS ALONG THE VALUE CHAIN

- Gender of enterprise owners and managers
- Contractual relations along the supply chain
- Factors that promote or discourage women's entry into the value chain
- Gender issues in credit access

END USERS: INDUSTRIES

- Brief history of business and strategic objectives
- Gender of owner and manager(s)
- Identification of sources of supply :
 - relationships (contracts and informal) with supplying companies
 - history of relationship
 - Women managed suppliers
 - Drop out suppliers
 - criteria for selection of supplier (location etc)
- Staff:
 - Numbers and job categories of workers (including women in leadership roles)
 - Recruitment policy (origins - sources of workers e.g. migrants, etc. equal opportunity/gender policy?) What are the reasons for this pattern? Note attitudes.
 - Staff profile by skills, gender and age
 - Permanent / temporary (contracts)
 - Wages (by gender and job category) and allowances
 - Working hours
 - Leave entitlements, including maternity, sick (HIV/AIDS), etc
 - Staff promotion procedures
 - Membership of any labour code, certification scheme?
 - Workers organisations, welfare, social, Trade Union etc.

- Facilities:
 - Washing
 - Protective clothing
 - First aid / health care on site
 - Worker training
 - Housing/ allowance
- Environment:
 - Waste disposal
- Marketing of products
 - distributors, retailers, customers
- Perception of constraints at supply level (prices, credit, skills, labour and processing capacity, infrastructure and transport, policy and regulatory, seasonal etc)

PROCESSORS (GRITS TO HQCF)

- Brief history of business and strategic objectives
- Gender of business owner and manager (s)
- Number and gender of workers in different processing steps (see INDUSTRIES) NB: labour requirements and gender of workers
- Identification of sources of supply:
 - Criteria for selection of supplier (location etc)
 - Types of suppliers
 - Scales
 - Location
- Contractual arrangements with suppliers (including informal personal linkages)
 - Gender
 - supplying companies
 - associations / groups
 - composition of association and type
 - leadership
 - Price differentials to suppliers
- Staff:
 - Job categories of workers (including women in leadership roles)
 - Recruitment policy (origins - sources of workers e.g. migrants, etc. equal opportunity/gender policy?) What are the reasons for this pattern? Note attitudes.
 - Staff profile by skills, gender and age
 - Permanent / temporary (contracts)
 - Wages (by gender and job category) and allowances
 - Working hours
 - Leave entitlements, including maternity, sick (HIV/AIDS), etc
 - Staff promotion procedures
 - Membership of any labour code, certification scheme?
 - Workers organisations, welfare, social, Trade Union etc.
- Facilities:
 - Washing
 - Protective clothing
 - First aid / health care on site
 - Worker training
 - Housing/ allowance
- Environment:
 - Waste disposal
- Marketing of products – customers
 - Industries
 - Exports
- Perceptions of market opportunities and constraints

- Perception of supplier (to processors) level opportunities and constraints / needs (prices, credit, skills, labour and processing capacity, infrastructure and transport, policy and regulatory, seasonal

VILLAGE PROCESSING UNITS (VPU)

- Biography of owner(s)
 - Gender,
 - age,
 - interest in cassava
 - production / processor
- Type of business ownership (association/family/legal status etc)
 - Association membership /gender /age
 - Head of VPU if family owned (sleeping partners)
 - Control of funds (and decisions) of VPU
 - Ownership and control of equipment and tools
- Source of credit: Start up capital for VPU
 - Procedures for accessing credit
- Sources of supply
 - Gender / age of suppliers
 - Constraints
- Type of product delivered to VPU (root or grits) by gender
 - Quantities
 - Quality of cassava / grits
 - Prices differentials (related to quality or scale) gender?
 - Perception of constraints faced by supplier
- Procedures at delivery at VPU
 - Who normally delivers to VPU (owner or representative of family)
 - Payments schedule (cash in hand or account)
- Perception of improved livelihoods by gender in local area
- Perception of VPU on production related constraints (by gender)
- Staff :
 - number of employees by gender
 - Staff roles / product and activity specialisation by gender
 - Source of employees
 - Wage/salary/seasonal – by activity
 - Contracts
- Health and environment: health and safety precautions in place
 - Facilities (toilets etc)
 - Quality assurance
 - Waste water disposal
- Infrastructure (road and transport, buildings/shelter)
- Area coverage of VPU
- Sources of information and support.

TRADERS

- Gender, age, Personal history in trade field (mini biography)
- Type – wholesale or retail* (implications for supply of HQCF to industries or to end consumer)
 - Reasons for choice of type of trade
- Sources of supply
 - How identified
 - Price differential in relation to type/scale/gender of supplier (in relation to sources of demand, seasonality)
 - Gender and suppliers
- Sources of information – reasons and constraints

- Sources of demand.
- Scale and reach of trade networks.
- Gender related issues in credit access
- Market associations
 - Membership
 - Gender, age of members
 - Criteria for joining association
 - Leadership
- Infrastructure/ transport constraints (women specific)
- Labour employment in trade related activities gender specific

HOUSEHOLD LEVEL PROCESSING

- Local definitions of 'household'.
- Gender roles and responsibilities (Productive, reproductive and community, especially food provisioning, cash earning, crop production)
- Gender roles and cassava production and processing - products, scale, decision making
- Access and control of land for cassava production
- Access to credit. Access to other inputs (planting material, labour – household and hired etc)
- Ownership and control of cassava yield (roots and grits)
- Control of cash from sale of cassava roots / grits and other cassava products. How negotiable?
- Gender and scale of marketing of roots /grits /other cassava products
- Distance women travel to nearest VPU, to markets, etc. (mobility mapping)
- Tendency to sell roots or grits/ other cassava products
 - Reasons for choice (labour, time etc)
 - Preference for roots / grits /other products
 - Decision making on sales
- Processing stages and gender roles
- Buying cassava roots /(grits) from neighbours for resale
 - From who do you buy (household type, seller (trader/producer) and gender)
 - Perceived constraints on the seller
- Constraints impacting on quality of roots / grits (shelter, drying platforms etc)
- Constraints faced by women on delivery of grits /roots to VPU
- Sources of information and support?

Gender Situational Analysis /Scoping Study Checklist

Cross-cutting issues: Gender, diversity age, religion, wealth

Farmers and communities

Who to ask: Key informants, Group(s), Individual – women, men, other important diversity aspects e.g. wealth

Community background

- Name and location of village/ community/district
- Who we are interviewing and the group interviewed
- Population and number of households in the community/village (specify unit). Presence of different ethnic groups?
- When was the community/village established?
- What are the main livelihood activities (for men and for women) What have been the recent changes?
- Do men and women have separate plots and cultivate their own crops and/or joint plots and crops? For which crops, including CASSAVA?

Which of the following livelihood activities are important in your community?	Proportion of the population involved	
	MEN	WOMEN
1. Farming 2. Fishing 3. Trading 4. Artisan 5. Factory workers 6. Civil servants 7. ----- Etc.		
<i>Scale: 0=nobody, 1=about ¼ of the people 2=about ½ of the people 3= about ¾ of the people, 4= everybody.</i>		

Role and importance of cassava in livelihoods

- Ranking of crops for food or cash.

CROP	MEN		WOMEN	
	CASH	FOOD	CASH	FOOD

- Land ownership distribution

Proportion of households in different farm size categories. (Scale: 0 – 4)	< 1 acre	1-2 acre	3-5 acres	> 5 acres
<i>Scale: 0=nobody, 1=about ¼ of the people 2=about ½ of the people 3= about ¾ of the people, 4= everybody</i>				

- Land access
 - Ability of women to access land (e.g women in male headed HHlds, female HHD households, widows etc.
 - Ability of men to access land
 - Ability of youth to access land.
 - Any particular individuals or groups having difficulty of accessing land.

Current level of cassava activities

- What is the total land area planted to cassava in the community
- Size of farms, current area of cassava grown, significance [cash, household food, etc], *Individual responses (from at least 10 farmers in discussion group)*

Sex	Cassava area planted last year	Cassava area planted this year	Reason for change in area	Pure or mixed crop	Yield per acre	Prop. Used for food	Prop. sold	Prop. not used

Production

- Overall community cassava production and surplus, how has it changed and why
- Have you ever grown cassava that you were unable to sell or consume?
- Under what conditions would you consider increasing your effort in cassava production?

Current production practices:

- Varieties List all varieties (modern and traditional reported; whether pure or mixed stands)
- Seasonal patterns of work on cassava, whether intercropping
- What proportion of farmers in the community do the following
(*Nobody, About ¼, About ½, About ¾, Everybody*)
 - a) Grow improved varieties
 - b) Grow local varieties
 - c) Intercrop cassava
 - d) Use machineries
 - e) Use herbicides
 - f) Use fertilizers`
 - g) Use hired labour
 - h) Are involved in collective field operations

Labour use for:	Family labour	Type of labour	Hired labour	Type of labour
		1 Mostly men 2 Mostly women 3 Both men and women 4 Mostly children 5 Few children 6 No children	1 Hired within the community 2 Migrants from outside the community	1 Mostly men 2 Mostly women 3 Both men and women 4 Mostly children 5 Few children 6 No children
Land clearing Tillage Planting Weed control Harvesting Field transport Transport to market Peeling, washing, Soaking Heaping Drying Chipping OTHER-----				

Access to credit (informal and formal – men and women)

- What are the different sources of credit available to men and women
- Which are most frequently used by men and women?
- How are these sources accessed? (individual and group)
- Explain the arrangements for repayment, including interest paid.

Current post-harvest practices:

Is cassava important for the following in your community? (Yes or No)	Food	Livestock	Industrial use	Others

- What are the current postharvest practices by individuals and communities?
- Into what products is cassava processed in the community.
- Are farmers aware of HQCF processes?
- Who does what and who decides

Tick as appropriate	Fresh roots	Boiled roots	Fried chips	Dried chips	Fermented flour	Wet cake	Grits	Other
After harvesting, cassava is consumed or marketed as:								
Rank these products in order of their								

importance for food (none, low, medium and high)									
Rank these products in order of their importance for cash (none, low, medium and high)									
Collective processing (Yes or No)									
Collective marketing (Yes or No)									
Awareness of the importance of cassava for each product (Yes or No)									

Economics of cassava farming (possibly do in cassava field?)

Details of costs and revenue throughout the cassava production and post harvest cycle

Activities	Cost in shillings(per acre or other specified unit)	Period of the year it is predominantly done	Dominant gender involved in each activity Male/Female
Land acquisition			
Land clearing			
Tillage			
Planting materials			
Planting			
Weed control			
Fertilizer			
Harvesting			
Transport from field			
Transport (bulking)			
Transport to market			
Processing			
Peeling, washing, soak			
heaping			
drying			
chipping			
Cost or labour time			
OTHER			

Current cassava markets and price trends:

- Current markets for cassava (*for what product, to whom and location*)
- Price trends and expectations for fresh cassava and various processed products
- Seasonal variation in markets

Provide answers as appropriate	Fresh roots	Boiled roots	Fried chips	Dried chips	Fermented flour	Wet cake	Grits	Other
Who buys? (1=consumers; 2=middlemen; 3=govt; 4=factories; 5=others)								
At what price per kg								
Where do you sell? (1=Farmgate; 2=community market; 3=distant market; 4=others)								
Market days (1=daily; 2=weekly; 3=others)								
What type of measures do you use? (1=local measure; 2=bags)								
What is the weight per measure? kg								
How do you sell? (1=retail; 2=wholesale)								
Which gender is dominant in this? (1=male; 2=female)								

Current and potential source of knowledge, negotiating skills and technologies about cassava (for men and for women)

	Cassava production	Cassava processing	Cassava marketing
Who provides you with information? (1=govt agents; 2=NGOs; 3=colleagues; 4=self; 5=others)			
On what topics and issues is information provided?			
Who provides you with technologies? (1=govt agents; 2=NGOs; 3=colleagues; 4=self; 5=others)			
How do you get the information? (1=meetings; 2=field days; 3=radio; 4=television; 5=mobile phone/telephone; 6=others)			

- How many individuals in the group own a mobile phone
- How many in the group have a television in their household
- How many in the group have a radio in their household
- Which gender has more access? – to mobile phone, TV, radio

Gender roles, responsibilities and benefits; access and control.

- Daily, seasonal and spatial patterns of work in domestic, agricultural and livelihood activities. Seasonal calendar for main activities.
- Decision making on use of income (men's, women's, joint) and responsibilities for household expenditure and investment. What is income used for – especially income from cassava.
- Have gender roles and responsibilities changed in recent times? How?

Activities	Who is responsible		Who takes decision		Who provides fund		Why the change?
	Now	10 yrs ago	Now	10 yrs ago	Now	10 yrs ago	
Land acquisition							
Land clearing							
Tillage							
Planting							
Weed control							
Harvesting							
Transport - bulking							
Transport to mkt							
Market sales							
Peeling, washing, Soaking							
Heaping							
Drying							
Chipping							
OTHER							
Child care							
Children education							
Food preparation							
Food supply							
Family health							
Clothing							
Shelter							
Generating income							
Other							

Poverty and vulnerability issues

- Who grows and processes cassava. – which social groups, gender, age etc. Have there been any changes.

- Situation of vulnerable and disadvantaged groups and households in the area, e.g. relating to gender, ethnicity, age, HIV, disability, migrants etc. Who are the most vulnerable groups. What makes them vulnerable?.

Discrimination rating (1=none; 2=low; 3=medium; 4=high)	Access to jobs	Access to land	Access to medication	Social gathering	Give reasons
Gender					
Ethnicity					
Age					
HIV status					
Disability					
Migrants					

Organisational & institutional issues

(Record for each group)

Do farmers function in groups
Name of group
Date of formation
How was group formed? (Initiative of individual, group, community, government, social or cultural initiative etc)
Group objectives (social, cultural, business, community development, political etc)
How are leaders elected? (Democratic, descent, age, wealth, gender etc)
Do men and women have equal chances of becoming group leaders?
List criteria for becoming a member
Current membership (men)
Current membership (women)
How often are meetings held?
Major duties of members?
Major benefits to members?
How are benefits distributed?
Do members sometimes quarrel or differ in opinion?
How do you make peace or solve problems in the group?

Strengths, weaknesses and needs

Farmers' perceptions of a) their strengths and weaknesses and b) External constraints at any point in production and post harvest cassava system and needs relating to these.

(e.g. land area and quality, labour, knowledge of cassava agronomy and post harvest practices, availability of machinery, processing equipment, markets, roads and transport, taxes, credit, water supply, electricity, group dynamics, influential individuals etc. etc.)

Production and post harvest	Strengths	Weaknesses	External Constraints	Needs identified (information, training, technology)
Production				
Post Harvest				
Marketing				
Other				

Factors promoting/ discouraging participation of women and the poor -. Economic, cultural, social (including attitudes and practice); skills and capacity, policy and regulatory factors etc. Potential benefits and risks of investment in cassava production and processing for different social groups.

Leave time for farmers own comments, questions other issues they would like to raise.

Community Based Processor Groups and Associations

Organisation of cassava processing – household, groups and enterprises.

- Operations and Governance of associations and farmer groups

- Origin of group/association [how initiated]
- Objectives and activities
- Leadership structure [gender, how appointed]
- Criteria for membership and current social composition. (gender, age, marital status)
- Meetings [frequency, time, normal agenda]
- Methods of maintaining unity and interest
- What equipment do they have? Ownership and control of equipment and tools
- Source of credit: Start up capital
- Products and product choice. Quality assurance
- Supply arrangements
 - Who is providing the fresh roots?
 - Criteria for selection of supplier (location, scale etc)
 - Catchment area
 - Prices for buying fresh cassava, including at different seasons?
 - Financial arrangement with farmers, e.g. do farmers provide labour to peel cassava? E.g. purchase on credit, cash payment etc.
- Labour hired by the group (if applicable)– numbers, gender, origins, wages
- Health and environment: health and safety precautions in place - protective clothing, first aid; facilities (washing , toilets etc), waste water disposal.
- Marketing arrangements and linkages – location of sales, market prices and price trends. Relationships with market traders.
- Ownership and benefit sharing arrangements within the group

Strengths, weaknesses and needs

- Processors (men and women) perceptions of a) their strengths and weaknesses and external constraints
- Processors perceptions of their information, training, technology needs based on above analysis.

Processing stage	Strengths	Weaknesses	External Constraints	Information and product needs identified

Service Providers: e.g. Government extension and NGOs

Current objectives, strategies and activities (including poverty and gender orientation)
 Do they provide support to: Individual farmers? Farmer groups? Faith groups? Small businesses?

Who do they not provide support to (Social exclusion: Gender, faith, poverty etc)?

Staff skills, numbers and associated resources etc

Perceptions of strengths and weaknesses of cassava situation in their target area

What are their perceptions of farmers' needs?

Perceptions of their own strengths and weaknesses in relation to achieving C:AVA objective

How could they provide support to C:AVA for:

- Pre-harvest management including access to superior varieties
- Post-harvest management eg technologies
- Group formation,
- Development of business skills
- Gender and diversity assessment and response